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DIMENSIONS OF PERFECTIONISM AS VULNERABILITY FACTORS
FOR DEPRESSION IN THE NARCISSISTIC AND OBSESSIVE-
COMPULSIVE PERSONALITIES: A TEST OF A SPECIFIC
DIATHESIS-STRESS MODEL

by

Patricia M. B. Cassady

A Dissertation Submitted to
the Faculty of the Graduate School at
The University of North Carolina at Greensboro
in Partial Fulfillment
of the Requirements for the Degree
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Theoretical and clinical descriptions of narcissistic and obsessive-compulsive personality disorders portray individuals with these disorders as pathologically perfectionistic. Personality dysfunction has been identified as a vulnerability factor for depression. The specificity hypothesis posits that the interaction of pathological personality characteristics and stress consistent with those personality characteristics has a depressogenic effect. It was hypothesized that individuals with obsessive-compulsive and narcissistic personality styles would respond with dysphoric mood in a different manner from one another, from individuals with other personality disorder styles, and from individuals with non-dysfunctional personality styles to stress congruent with self-oriented perfectionism, other-oriented perfectionism, and socially prescribed perfectionism. It was also hypothesized that stress congruent with self-oriented and socially prescribed perfectionism would produce higher levels of dysphoria than stress congruent with other-oriented perfectionism, regardless of participant personality style.

Participants in the present study were 61 undergraduate women who were selected for participation in the study on the basis of their responses to the SCID-II Screen and the SCID-II Interview. All participants viewed six videotaped scenarios (two for each of the three dimensions of perfectionism) which depicted stress congruent with the

three dimensions of perfectionism. Mood change in response to the videotaped stressors was measured using the Depression Adjective Checklists.

Multivariate analyses of covariance were conducted to test the main hypotheses. The main hypotheses regarding the differential dysphoric responses to stress congruent with perfectionism in the narcissistic and obsessive-compulsive personalities were not supported. Moreover, only exposure to stress congruent with socially prescribed perfectionism resulted in significantly high levels of dysphoria in all participants.

Results were examined in light of the strengths and limitations of the study and the adequacy of the hypotheses to capture the relationships among perfectionism, stress, and depression in the two personalities of interest.

APPROVAL PAGE

This dissertation has been approved by the following committee of the Faculty of The Graduate School at The University of North Carolina at Greensboro.

Dissertation Advisor

Rosemary Nelson Gray

Committee Members

Grace E. Kinsling

Phyllis L. Lamm

Elizabeth A. Hall

Robert L. Eason

8-15-96

Date of Acceptance by Committee

7-30-96

Date of Final Oral Examination

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CHAPTER I

INTRODUCTION

In recent decades, the relationship between personality and depression has been the focus of a great deal of investigation (Hirschfeld & Shea, 1992). Numerous published reports have demonstrated a high comorbidity of depression and personality disorder (Farmer & Nelson-Gray, 1990; Pfohl, Stangl, & Zimmerman, 1984; Shea, Glass, Pilkonis, Watkins, & Docherty, 1987). The comorbidity between these two classes of disorders ranges between 37% and 87%, depending upon the criteria used to diagnose personality disorders (Shea et al., 1987). Studies of the comorbidity between depression and personality suggest that certain personality disorders are more likely than others to be found in individuals with a primary diagnosis of depression. For example, Cluster C personality disorders (e.g., obsessive-compulsive, avoidant, and dependent) are more likely than other personality disorders to be present in samples of depressed outpatients, whereas Cluster B personality disorders (especially borderline and histrionic) are more likely to be present in depressed inpatients (Shea, Widiger, & Klein, 1992).

Individuals who exhibit both depression and personality disorder appear to differ qualitatively along several dimensions from persons who experience depression in the absence of personality disorder. Personality disordered individuals tend to have an earlier age of onset of initial depressive episode, more frequent depressive episodes, more

severe depressive episodes, and poorer long-term outcomes compared to depressives who do not meet the criteria for personality disorder (Farmer & Nelson-Gray, 1990; Klein, Wonderlich, & Shea, 1993; Shea et al., 1987).

Personality disorders are the currently diagnosed form of personality pathology. There are, however, other forms of personality dysfunction which have also been found to be closely associated with depression. Dysfunctional personality characteristics, such as dependency, introversion, neuroticism, self-criticism, and perfectionism, have also been shown to have a close association with depressive disorders (Barnett & Gotlib, 1988; Hirshfeld & Shea, 1992; Klein et al., 1993). The direction of the relationship between dysfunctional personality characteristics and depression has not yet been settled. The great majority of studies which have addressed this relationship have been comparisons of the personality characteristics of individuals who have never been depressed with those of recovered depressives or persons currently suffering an episode of major depression.

Recovered depressives have been found to be more dependent than never-depressed controls in several studies (Hirschfeld, Klerman, Clayton & Keller, 1983; Hirschfeld, Klerman, Clayton, Keller, & Andreasen, 1984; Reich, Noyes, Hirschfeld, Coryell, & O' Gorman, 1987). Recovered depressives have also been shown to be more introverted than non-depressed controls (Hirschfeld et al., 1983; Hirschfeld & Klerman, 1979). Depressed individuals also exhibit higher levels of neuroticism, the tendency to be emotionally labile, than do non-depressed controls

(Hirshfeld & Klerman, 1979; Hirshfeld et al., 1984). Overall, neuroticism scores tend to decrease as depressive symptoms subside (Barnett & Gotlib, 1988). Self-criticism, the tendency to experience guilt and to evaluate oneself as worthless and inferior, is another personality style which has been shown to be characteristic of a proportion of individuals experiencing depression (Blatt, D'Afflitti, & Quinlan, 1976; Blatt, Quinlan, Chevron, McDonald, & Zuroff, 1982).

Numerous studies have confirmed the association between depression and perfectionism in both student and clinical populations (Flett, Hewitt, Blankstein, & O' Brien, 1991; Frost, Marten, Lahart, & Rosenblate, 1990; Hewitt & Dyck, 1986; Hewitt & Flett, 1990; Hewitt & Flett, 1991; Hewitt & Flett, 1993; Hewitt, Mittelstaedt, & Flett, 1990; Pirot, 1986). Perfectionism has been defined as the holding of unrealistic standards for one's own (and/or others') performance. The focus of the present study was to determine if perfectionism constitutes a specific vulnerability to depression in persons with narcissistic personality disorder and obsessive-compulsive personality disorder. Perfectionism is viewed by many theorists as the core pathology in obsessive-compulsive personality disorder (Ingram, 1982). Individuals with narcissistic personality disorder are exacting and perfectionistic in regard to the standards they set for their own performance in many domains of endeavor. For narcissistic individuals, this perfectionistic stance is believed to function primarily as a defense against feelings of inferiority (Kernberg, 1967; Nemiah, 1961; Sorotzkin, 1985).

Models of the Relationship between Personality and Depression

There are numerous models which have been proposed to account for the relationship between personality and depression (Farmer & Nelson-Gray, 1990; Hirschfeld & Shea, 1992; Klein et al., 1993). Hirschfeld and Shea (1992) outlined four major classes of these models which the authors believe are most important in terms of generating research that may shed light upon the relationship between depression and personality.

The complication models propose that the experience of one or more episodes of clinical depression may lead to or cause changes in personality. For example, persons who have been depressed for a long period of time, or who have experienced recurrent episodes of depression may become increasingly dependent as a result of these episodes.

According to the spectrum models, certain personality styles can be considered attenuated manifestations of affective disorders. Both the personality characteristics and full-blown affective disorder are considered different forms of the same underlying pathology. For example, chronic pessimism and dysthymic disorder would be considered two ends of the same continuum of pathology.

The pathoplasty models propose that affective disorders and personality pathology are distinct entities, but that when the two conditions occur simultaneously, interactions between the two have an influence upon symptom profiles. For example, depression in a person suffering from histrionic personality disorder may be characterized by hostility, crying, and demandingness, whereas depression in a person with compulsive personality disorder may be characterized by withdrawal, anxiety, and expressions of guilt (Millon & Kotik, 1985).

The predisposition or vulnerability models propose that the relationship between personality pathology and depression is causal in nature. In other words, one condition is believed to constitute a risk factor for the other. Most often, it is hypothesized by proponents of these models that specific personality characteristics constitute vulnerability factors for the development of depression. A subset of the vulnerability models, the diathesis-stress models, specify that depression results from the interaction between personality characteristics and specific stressful experiences to which the individual is vulnerable, by virtue of his or her personality style (Monroe & Simons, 1991). For example, dependent persons may be more likely to become depressed following interpersonal rejection, whereas self-critical persons may be more likely to become depressed following the failure to obtain a desired goal (Blatt, 1974).

A number of different categories of diatheses, which are considered to render the individual vulnerable to depression have been proposed (e.g., biological, cognitive, and personality). Two major assumptions of the majority of diathesis-stress models are that the diathesis of interest is relatively rare in the population and that the presence of the diathesis is a necessary, but not sufficient cause for the onset of depression. Life stress is viewed primarily as the precipitant to the disorder (Monroe & Simons, 1991). The diathesis-stress view is supported by the finding that only a relatively small proportion of individuals who have experienced stressful events of large magnitude (e.g., death of a spouse) later become clinically depressed (Brown & Harris, 1986; Paykel, 1992). Moreover, the experience of stressful events prior to the

onset of depression is seen almost as frequently in patients with symptom profiles characteristic of endogenous depression as in patients with symptom profiles characteristic of reactive depression (Brown, Ni Bhrolchain, & Harris, 1979; Grove & Andreasen, 1992).

Another issue relevant to the diathesis stress models is the nature of the stress experienced by hypothetically vulnerable individuals in terms of the frequency, magnitude, and quality of the stressful event(s). Typically, major life events (e.g., loss of a job or death of a spouse) occur relatively infrequently. Brown and Harris (1986) have demonstrated that severe losses are strongly associated with the onset of major depression. Yet many persons who experience a major depression have not recently experienced a major stressful life event. Other authors have proposed that the experience of chronic, minor aversive events (daily hassles) can also predict depressive episodes (Hewitt & Flett, 1993; Lazarus, 1990; Rook, 1987). An alternative view of the role played by daily hassles in relation to depression is that these minor, chronic stressors may be involved in the persistence of depression (Depue & Monroe, 1986).

As noted above, several types of diatheses which render individuals vulnerable to depression have been hypothesized. According to the biological models, the tendency for the dysregulation of neurochemical systems in response to stress constitutes a diathesis for depression (Siever & Davis, 1985). Cognitive theorists propose that dysfunctional cognitive schemas or processes predispose individuals to become depressed when faced with adversity (Abramson, Seligman, & Teasdale, 1978; Beck, 1987). Dysfunctional personality characteristics and

personality disorders have also been hypothesized to function as diatheses which render individuals vulnerable to depression (Millon & Kotik, 1985).

According to the diathesis-stress model, it is the interaction of life stress with a preexisting vulnerability factor which produces pathological responses. A derivative of the diathesis-stress model, the specificity hypothesis, proposes that only life stress which is congruent with a particular diathesis will interact with that diathesis to produce a pathological response. For example, it has been hypothesized that persons who rely primarily upon nurturing relationships to maintain their sense of well-being are particularly vulnerable to becoming depressed after experiencing social rejection or the loss of an individual upon whom they have come to depend. Conversely, individuals who rely upon the achievement of goals to maintain self-esteem are hypothesized to be vulnerable to depression should they fail to attain their goals (Arieti & Bemporad, 1980; Beck, 1983; Blatt, 1974).

Perfectionism

Perfectionism is one personality characteristic which has been cited as a potential vulnerability factor in depression by psychodynamic, cognitive, and social learning theorists (Adler, 1956; Beck, 1967; Bibring, 1953; Blatt, 1995; Burns, 1980; Hamacheck, 1978; Hollender, 1965; Horney, 1950; Kanfer & Hagerman, 1981). Hollender (1965) defines perfectionism, not as an attitude held by the individual, nor an attribute of the individual, but as the manner in which the person behaves or attempts to behave. Other theorists define

perfectionism as the holding of unrealistic and excessively stringent standards for performance for the self and/or other persons (Burns, 1980; Hamachek, 1978; Pacht, 1984).

The distinction has been drawn between normal perfectionism, which is the healthy pursuit of excellence, and neurotic or pathological perfectionism, which is the striving for an unrealistic level of performance given the demands of the particular task at hand (Hamacheck, 1978; Horney, 1950; Pacht, 1984). Adler (1956) theorized that the striving for perfection in one's behavior is normal and is necessary for healthy development. In the normal individual, perfectionistic behavior is adaptive and flexible. That is, the person works to achieve high standards of performance, but is able to adjust his or her standards to fit the demands of the situation. It is only when the attempt to perform in a superior manner becomes inflexible that the person's behavior is considered pathological. The pathological perfectionist is not only inflexible, but exhibits this style of behavior across many different domains of functioning (Adler, 1956; Hollender, 1965).

The acquisition of dysfunctional perfectionistic behavior is theorized to occur in the context of early child-parent interactions. According to Hollender (1965), two types of parental responses to children's effortful behavior can lead to the development of perfectionistic behavior in the child. In one case, parents either fail to reinforce the child for his or her goal-directed activities or reinforce the child's efforts inconsistently. In the other case, poor or adequate performance by the child may be punished.

Barrow and Moore (1983) propose there are four parental behaviors that facilitate the development of perfectionistic behavior in the child: overly critical responses to the child's efforts, perfectionistic parental standards for the child's behavior, the absence of standards for adequate or acceptable behavior by the child, and the modeling of perfectionistic behavior by the parents.

Some support for Barrow and Moore's (1983) contention that parental perfectionism contributes to the development of perfectionism in children was demonstrated by a study conducted by Frost, Lahart, and Rosenblate (1991). These authors reported that the level of mothers' self-reported perfectionism contributed significantly to daughters' level of self-reported perfectionism and was associated with daughters' self-reported psychological symptoms.

Beck (1976) also implicates early learning experiences in the development of perfectionistic behavior. Defective learning experiences result in the acquisition of erroneous assumptions and distorted patterns of thinking which are considered characteristic of individuals who exhibit perfectionistic behavior. Several cognitive biases are considered common in perfectionists by cognitive theorists (Sorotzkin, 1985). These biases in thinking and the dysfunctional assumptions characteristic of perfectionists are believed to render the individual likely to respond to stressful situations by developing depressive affect, particularly when the perfectionist experiences situations in which his or her basic assumptions have been challenged (Beck, 1976; Burns, 1980).

One cognitive bias which is believed to be particularly characteristic of the perfectionist is dichotomous thinking. The individual evaluates his or her behavior (and often that of others) in absolute terms, either as all good or all bad. If a single flaw is noted, the individual does not judge the performance as adequate, but judges it as a complete failure (Burns, 1980). Overgeneralization is another cognitive style which is typical of the thinking of perfectionists. The individual will draw broad conclusions regarding his or her performance in future endeavors from a single outcome. Thus, the perfectionistic individual who experiences a single failure will conclude that he or she will always fail (Burns & Beck, 1978). Perfectionists are also believed to engage in overly moralistic self-evaluation. If the individual fails to achieve an important goal or deviates from his or her stringent standards of conduct, he or she will likely respond with self-denigration (Burns & Beck, 1978).

The perfectionist's standards are not limited solely to achievement or goal-directed behaviors. Harsh standards may also exist for the individual's performance in the domain of interpersonal relationships. Moreover, perfectionists often tend to expect that others evaluate them against the same kinds of exacting standards the perfectionist holds for his or her own behavior. The interpersonal relationships of perfectionists are often disturbed because the individual fears criticism or rejection should he or she fail to live up to others' presumed expectations. Consequently, perfectionists often withdraw from intimate social contact rather than risk criticism or rejection (Beck, 1976). Both the lack of supportive interpersonal relationships and the

discrepancy between actual performance and unrealistically high standards are believed by cognitive theorists to make perfectionists particularly prone to depression (Beck, 1976; Sorotzkin, 1985).

Dimensions of Perfectionism

The distinction between healthy and pathological perfectionism had been drawn by early theorists interested in the construct (Adler, 1956; Burns, 1980; Hamachek, 1978; Horney, 1950; Pacht, 1984). It was not until relatively recently that investigators recognized that pathological perfectionism may not be a unitary construct. Frost and his associates (Frost et al., 1990) hypothesized that perfectionism is comprised of six dimensions: excessive concern over mistakes, high personal standards, perception of high parental standards, perception of high parental criticism, doubting the quality of one's actions, and preference for order and organization. These authors developed the Multidimensional Perfectionism Scale (MPS; Frost et al., 1990) and conducted a series of correlational studies designed to determine the relationship between the dimensions of perfectionism and a variety of psychopathological conditions. The analyses revealed that five of the six dimensions of perfectionism proposed by the authors were associated with a wide range of psychopathology in a non-clinical sample of university students. The only dimension of perfectionism which did not correlate with some form of psychological distress was the high personal standards dimension. The endorsement of holding high personal standards was related to the experience of healthy psychological experiences.

Hewitt and Flett (1991a) have approached the dimensionality of perfectionism from a different direction than have Frost and his

colleagues. Hewitt and Flett (1991a) propose that perfectionism can be conceptualized as a three-dimensional construct with both intrapersonal and interpersonal aspects. The three dimensions of perfectionism are not necessarily independent. Self-oriented perfectionism is characterized by behaviors such as the setting of excessively high standards for personal conduct and the stringent and critical evaluation of one's performances against such standards. Other-oriented perfectionism is characterized by the setting of unrealistically high standards for the behavior of other individuals. Socially prescribed perfectionism is characterized by the belief that other individuals, particularly significant others, have imposed excessively high standards against which the individual's behavior is judged. Moreover, these other-imposed standards are viewed by the individual as uncontrollable.

The Multidimensional Perfectionism Scale (MPS; Hewitt & Flett, 1990) was developed to tap the three dimensions of perfectionism described above. A series of four studies was then conducted which demonstrated that the three dimensions of perfectionism can be distinguished from one another and that each of the dimensions can be assessed reliably and validly both in student and in clinical samples. In addition, these correlational analyses indicated that all three of the dimensions of perfectionism were associated with a variety of negative psychological states in students and in psychiatric patients, albeit in slightly different patterns of relationships.

Based on the results of this series of studies, it appears that each of the three dimensions of perfectionism are related to different sets of symptom profiles. For instance, in the student samples, self-

oriented perfectionism was correlated with all nine subscales of the Symptom Checklist 90-Revised (SCL-90-R; Derogatis, 1983), anger as measured by the Multidimensional Anger Inventory (MAI; Siegel, 1986), and guilt as measured by the Problem Situation Questionnaire (PSQ; Klass, 1987), whereas socially prescribed perfectionism was correlated with all nine subscales of the SCL-90-R and with anger as measured by the MAI. In contrast, other-oriented perfectionism was correlated with only the phobia and the paranoia subscales of the SCL-90-R and was correlated with neither anger as measured by the MAI nor guilt as measured by the PSQ.

In the psychiatric sample, self-oriented perfectionism was correlated with somatoform symptoms, hypomania, alcohol, and drug abuse, as measured by the clinical symptom subscales of the Millon Clinical Multiaxial Inventory (MCMI; Millon, 1983). Other-oriented perfectionism was correlated with hypomania and drug abuse as measured by the MCMI. Socially prescribed perfectionism was most strongly correlated with anxiety, dysthymia, and psychotic depression as measured by the MCMI. In addition, the three dimensions of perfectionism correlated with several of the personality disorders, as assessed by the Millon Clinical Multiaxial Inventory. In summary, the results of this series of studies suggest that perfectionism and a broad range of psychopathological conditions are related, and that different aspects of perfectionism are associated with different symptom profiles.

Perfectionism and Depression

The relationship between perfectionism and depression is of particular relevance to the present study. Numerous investigations have

revealed an association between perfectionism and depression. Earlier studies of this relationship focused upon the relationship between depression and perfectionistic standards for the self, as measured primarily by the Burns Perfectionism Scale (BPS; Burns, 1980). Pirot (1986) administered the BPS and a measure of depression to a small sample of university students, and found a weak, but significant, correlation between perfectionism and depression. Hewitt and Dyck (1986) examined the relationship between perfectionism, stressful life events, and depression in a student sample at two points in time. In support of the diathesis-stress model, significant correlations between life stress and depression were found at both Time 1 and Time 2 for perfectionists, whereas this effect was not found for nonperfectionists.

Hewitt, Mittelstaedt, and Flett (1990) administered the Burns Perfectionism Scale and the Beck Depression Inventory (BDI; Beck, Ward, Mendelson, & Erbaugh, 1961) to a group of college students. In addition, the participants were asked to rate how important it was for them to perform well in 14 different domains of functioning. A regression analysis indicated that the interaction between endorsing high standards of performance across several domains of functioning and perfectionism predicted a significant proportion of the variance in depression scores. Frost et al. (1990) found significant correlations between perfectionism, as measured by their perfectionism scale, and both self-critical depression and dependency depression, as measured by the Depressive Experiences Questionnaire (DEQ; Blatt, D'Afflitti, & Quinlan, 1976).

There have been several investigations into the relationship between depression and the three dimensions of perfectionism defined by Hewitt and Flett (1991a). Flett, Hewitt, Blankstein, and O'Brien (1991) found that the interaction of self-control, as measured by the Self-Control Schedule (SCS; Rosenbaum, 1980), and socially prescribed perfectionism predicted a significant proportion of the variance in students' depression scores. Specifically, students high in socially prescribed perfectionism and low in self-control reported the highest levels of depression. Hewitt and Flett (1991a, Study 3) reported that both socially prescribed perfectionism and self-oriented perfectionism correlated significantly with depression, as measured by the depression subscale of the Symptom Checklist-90-Revised (SCL-90-R; Derogatis, 1983) in a student sample.

The relationship between depression and the three dimensions of perfectionism has also been examined in patient samples. Correlations between socially prescribed perfectionism and both dysthymia and psychotic depression, as measured by the Millon Clinical Multiaxial Inventory, were found in a heterogeneous sample of psychiatric patients (Hewitt & Flett, 1991a, Study 5).

Hewitt and Flett (1991b) examined the relationship between each of the three dimensions of perfectionism and depression in depressed patients, patients diagnosed as suffering from anxiety disorders, and normal controls. Group differences in the relationship between perfectionism and depression were revealed. Specifically, depressed patients demonstrated higher levels of self-oriented perfectionism than did either the anxious patients or the normal controls. Also, depressed

patients and anxious patients demonstrated higher levels of socially prescribed perfectionism than did the normal controls. Depressed and anxious patients did not differ significantly in regard to the level of socially prescribed perfectionism exhibited. When the data from all three groups were combined, regression analyses indicated that self-oriented perfectionism and socially prescribed perfectionism each predicted a unique proportion of the variance in depression scores.

A test of the diathesis-stress model relating depression and perfectionism was conducted by Flett, Hewitt, Blankstein, and Mosher (1991). These authors reported that the interaction between socially prescribed perfectionism and major life stress and the interaction between self-oriented perfectionism and major life stress accounted for a significant proportion of the variability in depression scores in a student sample. Moreover, students with high levels of self-oriented and/or socially prescribed perfectionism and high levels of life stress were the most depressed in the sample.

A more recent test of the diathesis stress model (Brown, Hammen, Craske, & Wickens, 1995) investigated changes in depression in college students using as predictors the interactions between factors of the Dysfunctional Attitudes Scale (DAS; Wiessman & Beck, 1978) and a specific stressor (poorer than expected performance on an examination). This study demonstrated that the interaction between perfectionistic achievement and poorer than expected examination performance was the strongest predictor of increased depression in this student sample.

Because perfectionism, as defined by Hewitt and Flett (1991a), is believed to have both intrapersonal and interpersonal components, it

seems reasonable that the dimensions of perfectionism might interact differentially with major categories of life stress. On the one hand, because self-oriented perfectionism reflects concerns regarding the attainment of goals, it might be expected that individuals high in self-oriented perfectionism might be particularly vulnerable to dysphoria when experiencing achievement-related stress. On the other hand, socially prescribed perfectionism reflects concerns regarding the individual's ability to meet the standards that others have set for the individual. Thus, individuals high in socially prescribed perfectionism might be particularly vulnerable to dysphoria when experiencing interpersonal stress.

A test of the specificity hypothesis was conducted by Hewitt and Flett (1993) using two patient samples, a unipolar depressed group and a heterogeneous patient sample which included primarily persons diagnosed with schizophrenia, bipolar disorder, and adjustment disorder. Two clinical samples were used to improve the generalizability of the study.

It was predicted that self-oriented perfectionism would interact with achievement hassles to predict increased depression in both samples, and that socially prescribed perfectionism would interact with interpersonal hassles to predict increased depression in both samples. Moreover, it was predicted that other-oriented perfectionism would not predict depression, either alone or in combination with either of the two classes of stressors. A series of hierarchical regression analyses were conducted to test these hypotheses.

As predicted, self-oriented perfectionism interacted with achievement hassles to account for unique variance in depression scores,

as measured by the Beck Depression Inventory, for both patient samples. Patients high in self-oriented perfectionism experienced increased depression as achievement stress increased. Also as predicted, socially prescribed perfectionism interacted with interpersonal hassles to account for unique variance in depression scores for the depressed patient sample. Depressed patients high in socially prescribed perfectionism experienced increased depression as interpersonal stress increased.

Contrary to predictions, however, the interaction between socially prescribed perfectionism and interpersonal hassles did not account for unique variance in depression scores for the mixed patient sample. In fact, the interaction between socially prescribed perfectionism and achievement hassles accounted for unique variance in depression scores for the mixed patient sample.

These results offer mixed support for the idea that self-oriented perfectionism and socially prescribed perfectionism constitute specific vulnerability factors for depression. One possible explanation for the unexpected interaction between socially prescribed perfectionism and achievement hassles as a predictor of depression for the mixed patient sample is that merely categorizing stress into two general categories, interpersonal and achievement, may not have constituted a sufficiently stringent test of the specificity hypothesis. It may be that, in order to test the specificity hypothesis in regard to the interaction between perfectionism and stress, it is necessary to expose individuals to stress which is specifically congruent with each of the two dimensions of perfectionism related to depression. This is an issue which was

directly addressed in the present study.

In summary, two of the three dimensions of perfectionism, self-oriented perfectionism and socially-prescribed perfectionism, have been shown to be related to depression in both student and patient samples. No relationship between other-oriented perfectionism and depression has been found using the Multidimensional Perfectionism Scale. Other-oriented perfectionism is hypothesized to have no direct relationship to depression (Blatt, 1995; Hewitt & Flett, 1993)

Perfectionism and Personality Disorders

Perfectionism is one of the criteria used in the Diagnostic and Statistical Manual Third Edition-Revised (DSM-III-R, American Psychiatric Association, 1987) to diagnose obsessive-compulsive personality disorder. This characteristic is considered, at least by some theorists, as the central feature of the disorder (Guidano & Liotti, 1983; Ingram, 1982). The perfectionistic behavior displayed by the individual with obsessive-compulsive personality disorder is exhibited both in the interpersonal and intrapersonal domains (Ingram, 1982). More specifically, persons with this disorder hold high standards for their own behavior, judge others stringently against similar high standards, and tend to adopt the rules and standards set down others who are perceived as figures of authority (Millon, 1981). Moreover, Millon (1981) argues that perfectionistic behavior is learned because parents punish any autonomous behavior exhibited by the child; consequently, the individual destined to develop obsessive-compulsive personality disorder learns to function socially by adhering not only to parental standards, but generalizes these standards to others in his or her social

environment.

Millon's (1981) description of these particular behaviors of the individual with obsessive-compulsive personality disorder are consistent with the three dimensions of perfectionism described by Hewitt and Flett (1991a). Other theoretical accounts focusing on the individual with obsessive-compulsive personality disorder also support the pervasiveness of perfectionism in these individuals' dealings with themselves and others. Weintraub (1986) argues that one of the major tasks of therapy with such individuals is to divest them of their "utopian expectations" for themselves and other persons. Ingram (1982) emphasized the obsessive-compulsive personality disordered individual's preoccupation with attaining perfectionism in all aspects of life. Moreover, Ingram (1982) viewed the compulsive's interpersonal relationships as disturbed due to the individual's tendency to control others in the service of adhering to stringent rules and due to the contempt with which obsessive-compulsive individuals treat viewed others who fail to conform to their standards. Horney (1950) also discussed the individual with a compulsive personality as holding an arrogant and contemptuous view of others, but described this attitude in terms of a projective defense against the recognition of the individual's own imperfections. Horney (1937) viewed the parent-child relationship as the origin of the compulsive personality. Children of authoritarian and self-righteous parents learn to disavow their own beliefs about reality and to adopt parental standards in order to attain acceptance and approval.

Cognitive theorists have focused upon the cognitive schema as the central aspect of the obsessive-compulsive personality (Beck, Freeman,

and Associates, 1990). Several of the schemas which are believed to guide the behavior of the individual with obsessive-compulsive personality disorder have perfectionistic content. For example, persons with this disorder tend to believe that imperfect behavior makes them bad or unworthy, that success requires perfection, that one should exert perfect control over himself or herself and the environment, that imperfect performance is deserving of criticism, and that no action is more desirable than imperfect action (Freeman, Pretzer, Fleming, & Simon, 1990; McFall & Wollersheim, 1979).

Depression is considered fairly common in persons suffering from obsessive-compulsive personality disorder (Millon & Kotik, 1985). Comorbid obsessive-compulsive personality disorder in depressed patients ranges from 20% to 39% (Oldham, Skodol, Kellman, Hyler, Doidge, Rosnick, & Gallaher, 1995; Shea et al., 1987). In many cases, depression in these individuals is precipitated by the failure to meet their own standards for performance or the standards they believe others have imposed upon them (Beck, Freeman et al., 1990; Millon & Kotik, 1985).

Perfectionism is also considered, by some theorists, to be characteristic of individuals who meet the criteria for narcissistic personality disorder (Akhtar & Thompson, 1982; Freud, 1957; Sorotzkin, 1985). Theoretical and clinical descriptions of narcissistic personalities have focused primarily upon these individuals' grandiose self-image and upon the exploitative manner in which they treat other persons. Both of these characteristics of the narcissistic personality can be considered related to self-oriented perfectionism and other-oriented perfectionism as defined by Hewitt and Flett (1991a). Nemiah

(1961) described individuals with narcissistic personality disorder as setting unrealistic goals for themselves, as driven by lofty ambition, and intolerant of personal failure or imperfection. Both Kohut (1966) and Kernberg (1967) considered intense ambition and unrealistic self-regard as central aspects of the narcissistic personality disorder. Indeed, Kernberg (1967) asserts that the belief in one's own perfection and omnipotence protects narcissists from recognizing their inner sense of badness and unloveability.

The manner in which individuals with narcissistic personality disorder view and treat other persons suggests that narcissists hold high standards for others to which these others are expected to adhere. Specifically, these high standards set for others are focused upon the manner in which others should regard and serve the narcissist. According to Kohut (1966), narcissists inappropriately idealize others who provide them with the attention and admiration they crave. Should the idealized other fail to treat the narcissist with the deference or consideration the he or she expects, the narcissist interprets this as an injury to self esteem and reacts with characteristic rage. Kernberg (1967) emphasizes the narcissist's overreliance upon acclaim and his or her exploitation of others to achieve his or her goals. According to Millon (1981), the narcissist expects other persons to serve him or her, yet believes that he or she is entitled to fail to reciprocate others' favors.

Depression is the most frequent Axis I condition seen in persons with narcissistic personality disorder. Comorbidity between depression and narcissistic personality disorder ranges from 1% to 12% (Oldham et

al., 1995; Shea et al., 1987). Both interpersonal and achievement stressors can function as precipitants for a depressive episode in these individuals. The thoughts characteristic of depressed narcissists are often focused upon the individual's unmet expectations for greatness and/or the disappointment he or she feels because other persons have not lived up to their standards or have proven inferior in some manner (Beck, Freeman et al., 1990; Klerman, 1974).

An association between perfectionism and personality disorder in general has also been found in the few empirical studies which have investigated this relationship (Broday, 1988; Hewitt & Flett, 1991a, Study 3; Hewitt & Flett, 1991a, Study 5; Lohr, Hamberger, & Bonge, 1988).

Broday (1988) administered the Burns Perfectionism Scale (Burns, 1980), the perfectionism subscale of the Common Beliefs Survey III (Bessai, 1977), and the eight basic personality subscales of the Millon Clinical Multiaxial Inventory (Millon, 1983) to a sample of students who were also clients at either university counseling services or at a private practice office. Correlations were calculated between each of the eight subscales of the Millon Clinical Multiaxial Inventory and each of the perfectionism scales. Significant positive relationships were found between the Millon personality patterns schizoid, avoidant, dependent, and passive-aggressive and the two perfectionism scales. Broday (1988) reported significant negative relationships between the Millon narcissistic and compulsive personality patterns and the two perfectionism scales. These findings are unexpected given theoretical accounts of the narcissistic and compulsive personality disorders.

Lohr et al. (1988) found a relationship between perfectionism, in the form of high expectations for the self, and several of the Millon personality patterns (avoidant, borderline, paranoid, and passive-aggressive) in a group of spouse abusers.

Hewitt and Flett (1991a, study 3) examined the relationship between narcissism, as measured by the Narcissistic Personality Inventory (Raskin & Hall, 1979), and the three dimensions of perfectionism measured by the Multidimensional Personality Scale (Hewitt & Flett, 1990), using a sample of university students. Consistent with theoretical descriptions of the narcissistic personality, narcissism was found to be positively correlated with both self-oriented perfectionism and other-oriented perfectionism, and was not correlated with socially prescribed perfectionism.

The relationship between personality disorder, as measured by the Millon Clinical Multiaxial Inventory, and the three dimensions of perfectionism was also explored in a sample of psychiatric patients (Hewitt & Flett, 1991a, Study 5). None of the eleven Millon personality styles was significantly correlated with self-oriented perfectionism. This finding is surprising in light of theoretical accounts of the narcissistic personality disorder and the compulsive personality disorder which suggest that individuals with these disorders set high standards for their own performance. Other-oriented perfectionism was positively correlated with the histrionic, narcissistic, and antisocial personalities, and was negatively correlated with the schizotypal personality. In regard to the narcissistic personality, this finding is consistent with theoretical descriptions of narcissists' expectations

for other persons' behavior, particularly in regard to meeting the needs of the narcissistic individual. Socially prescribed perfectionism was positively correlated with the schizoid, avoidant, passive-aggressive, schizotypal, and borderline personalities, and was negatively correlated with the compulsive personality. This last finding is particularly surprising because theoretical accounts of the compulsive personality disorder emphasize that persons with this disorder strive to meet the standards set by persons whom they perceive to be authority figures.

Taken together, the results of these correlational analyses suggest that there is some relationship between perfectionism and the personality disorders, in general. None of these empirical investigations of this relationship has examined perfectionism in samples which were comprised primarily of personality disordered individuals. In fact, less than ten percent of the persons in the Hewitt and Flett sample (1991a, Study 5) had a primary diagnosis of personality disorder. For this reason, the results of these studies must be interpreted with caution.

The relationships between each of the dimensions of perfectionism and the obsessive-compulsive personality disorder and the narcissistic personality disorder are particularly relevant to the present study. Neither Broday (1988) nor Hewitt and Flett (1991a, Study 5) found the relationships between the obsessive compulsive personality disorder and the dimensions of perfectionism that would be expected based upon theoretical accounts of these disorders. In fact, both studies found an inverse relationships between the compulsive personality, as measured by the Millon Clinical Multiaxial Inventory, and measures of self-oriented

and socially prescribed perfectionism. Moreover, no relationship between compulsive personality and other-oriented perfectionism was found, contrary to theoretical accounts of the disorder.

One possible explanation for this unexpected finding is that the compulsive personality subscale of the Millon Clinical Multiaxial Inventory may not be a valid measure of that construct. At least two recent studies have found that the compulsive subscale of the MCMI was not correlated significantly with the MMPI obsessive-compulsive personality disorder subscale (McCann, 1989; Morey & Levine, 1988).

The results of the studies by Broday (1988) and Hewitt and Flett (1991a, Study 3, Study 5) offer mixed support for the relationships between the dimensions of perfectionism and the narcissistic personality disorder that would be expected based upon theoretical accounts of the disorder. Broday (1988) found an inverse relationship between the narcissistic personality, as measured by the MCMI, and two measures of self-oriented perfectionism, inconsistent with theoretical accounts of the disorder. Hewitt and Flett (1991a, study 5) found a positive relationship between the narcissistic personality, as measured by the MCMI, and other-oriented perfectionism. This finding was consistent with theoretical accounts of narcissist's demanding and exploitative behavior toward other persons. No relationship between narcissistic personality and self-oriented perfectionism was found in this study, contrary to what would be expected given the narcissist's grandiose self-image and lofty ambitions. Finally, Hewitt and Flett (1991a, Study 3) found positive correlations between narcissism, as measured by the Narcissistic Personality Inventory, and self-oriented perfectionism and

between narcissism and other-oriented perfectionism, as would be expected given theoretical descriptions of the narcissistic personality disorder.

The results of the three studies cited above did not offer sufficient support for the existence of the theoretically expected relationships between narcissistic personality disorder and self-oriented perfectionism and other-oriented perfectionism, and between obsessive-compulsive personality disorder and all three dimensions of perfectionism. For this reason, it was decided that an additional investigation of the hypothesized relationships between these two personality disorders and the dimensions of perfectionism was necessary. In each of the three studies cited above, the Millon Clinical Multiaxial Inventory (Millon, 1983) was used as a measure of personality disorder. It was hypothesized that a different measure of the obsessive-compulsive personality disorder and the narcissistic personality disorder, such as the Structured Clinical Interview for the DSM-III-R Axis II (SCID-II; Spitzer, Williams, & Gibbon, 1987), would correlate with the three dimensions of perfectionism in the manner suggested by theoretical accounts of those disorders.

The Multidimensional Perfectionism Scale (MPS; Hewitt & Flett, 1990) and the self-report form of the Structured Clinical Interview for DSM-R Axis II (SCID: Spitzer et al., 1987) were administered by the principal investigator to Introductory Psychology students during Mass Testing during the Fall 1993 semester. (Copies of the MPS and the SCID-II can be found in Appendix B and Appendix C, respectively). Three hundred sixty-eight students completed both questionnaires. Correlations

between each of the three dimensions of perfectionism and each of the 11 personalities were calculated. (A table of these correlations can be found in Table 1 in Appendix A). Significant positive correlations were found between obsessive-compulsive personality, as measured by the self-report version of the SCID, and all three dimensions of perfectionism measured by the MPS. Significant positive correlations were also found between the narcissistic personality and all three dimensions of perfectionism. This finding is somewhat surprising in that no relationship was expected between narcissistic personality and socially prescribed perfectionism. It must be noted that, for this sample of normal college students, socially prescribed perfectionism was significantly and positively correlated with all 11 of the personality styles.

In regard to the magnitude of the relationships between the three dimensions of perfectionism and the personality disorders, self-oriented perfectionism correlated most strongly with obsessive-compulsive personality, other-oriented perfectionism correlated most strongly with narcissistic personality, and socially prescribed perfectionism correlated most strongly with borderline personality.

Statement of Purpose

The primary purpose of the present study was to determine if different types of perfectionism, as defined by Hewitt & Flett (1991a), constitute specific vulnerabilities for depression in individuals with either narcissistic personality disorder style or obsessive-compulsive personality disorder style, compared to individuals with other personality disorder styles and to nonpersonality-disordered

individuals.

According to the diathesis-stress models of depression, the experience of life stress interacts with a preexisting vulnerability state to produce a depressive reaction (Monroe & Simons, 1991). A derivative of the diathesis-stress model, the specificity hypothesis, posits that only stress consistent in some manner with the vulnerability factor of interest will interact with that vulnerability factor to produce a depressive reaction (Garber & Hollon, 1991).

Participants in the present study were female students categorized into four groups (narcissistic personality disorder analogues, obsessive-compulsive personality disorder analogues, mixed personality disorder analogues, and no personality disorder) on the basis of their responses to the SCID interview. The participants were exposed to three sets of analogue stressful situations, in the form of videotapes. Each pair of videotapes depicted stressful situations consistent with one of the three types of perfectionism. In one pair of videotapes, the protagonist experiences aversive events in which she fails to perform in a manner consistent with perfectionistic standards she has set for herself. In the second pair of videotapes, the protagonist experiences aversive events in which another person has failed to conform to the protagonist's perfectionistic standards. In a third pair of videotapes, the protagonist experiences aversive events in which she failed to perform in accordance with the standards established for her by a significant other.

Theoretical and clinical descriptions of the obsessive-compulsive personality disorder suggest that these individuals are perfectionistic

in all three domains defined by Hewitt and Flett (1991a). These individuals hold stringent standards for their own and others' performance (Beck, Freeman et al., 1990; Horney, 1950; Ingram, 1982; Millon, 1981; Weintraub, 1986). Moreover, much of the behavior of persons with obsessive-compulsive personality is in strict conformity to the rules of conduct others have established for them (Horney, 1937; Ingram, 1982; Millon, 1981). Although all three types of perfectionism can be seen in the behavior of individuals with obsessive-compulsive personality disorder, it was expected that only stressful situations related to self-oriented perfectionism and socially prescribed perfectionism would precipitate dysphoric reactions in these individuals. There are two reasons for this prediction. First, stressors related to self-oriented and socially prescribed perfectionism involve personal failure, whereas stressors related to other-oriented perfectionism do not involve personal failure. Such personal failures have been hypothesized to function as precipitants of depression in persons with obsessive-compulsive personality disorder (Beck, Freeman et al., 1990). Second, previous research examining the relationship between perfectionism and depression has not found an association between depression and other-oriented perfectionism (Hewitt & Flett, 1993).

Theoretical and clinical descriptions of persons with narcissistic personality disorder suggest that self-oriented perfectionism and other-oriented perfectionism, as defined by Hewitt and Flett (1991a), are characteristic of many of the behaviors of persons with this disorder. Narcissists have been described as perfectionistic in regard to their

own self-image and expectations for their own talents and achievements (Kernberg, 1967; Kohut, 1966; Nemiah, 1961). Narcissists' behavior toward other persons is also tinged with perfectionism. Persons who are able to provide them with the adoration they demand are idealized (Kernberg, 1967; Kohut, 1966). Narcissists also believe that other persons should serve them and defer to them (Millon, 1981).

According to psychoanalytic theory, individuals with narcissistic personality disorder react to personal failure with emptiness or humiliation and to interpersonal disappointment with rage (Kernberg, 1967; Kohut, 1966). Depressive reactions are, however, not uncommon in persons with narcissistic personality disorder, particularly when the narcissist's unrealistic expectation for the self and/or others have not been met (Beck, Freeman et al., 1990; Klerman, 1974). Although both self-oriented and other-oriented perfectionism are theoretically characteristic of individuals with narcissistic personality disorder, it was expected that only analogue stressful situations related to self-oriented perfectionism would precipitate dysphoric reactions in these individuals.

There are two reasons for this prediction. First, across different populations of subjects, no relationship between depression and other-oriented perfectionism has been found (Hewitt & Flett, 1993). Second, although it may be true that narcissists become depressed or enraged in response to interpersonal stress, it is most likely that this reaction is limited to major interpersonal stressors, such as the loss of an important relationship (Beck, Freeman et al., 1990; Rado, 1928); however, depression is seen as a common reaction when narcissists

encounter stressors which undermine their perfectionistic self-image (Beck, Freeman et al., 1990; Millon & Kotik, 1985; Rothstein, 1991).

The following hypotheses were tested:

1. The obsessive compulsive personality disordered group was expected to react with increased dysphoria to the videotapes depicting stressful situations related to self-oriented and socially prescribed perfectionism. No significant change in mood was expected for this group following exposure to the film depicting the stressful situation related to other-oriented perfectionism.

2. The narcissistic personality disordered group was expected to react with increased dysphoria to the videotapes depicting the stressful situations related to self-oriented perfectionism. No significant change in mood was expected for this group following exposure to the videotapes depicting stressful situations related to other-oriented perfectionism and socially prescribed perfectionism.

3. The narcissistic and obsessive-compulsive personality disordered groups were expected to react with greater dysphoria to the videotapes depicting the stressful situations related to self-oriented perfectionism than were the non-personality disordered group and the mixed personality disordered group. Moreover, the narcissistic group was expected to evidence a greater dysphoria than the obsessive-compulsive group in reaction to the videotapes depicting the stressful situations related to self-oriented perfectionism. In general, persons with narcissistic personality disorder are more emotionally labile than are persons with obsessive compulsive personality disorder (Siever & Davis, 1991).

4. No significant differences in mood change were expected to be found among the four groups following exposure to the videotapes depicting the stressful situations related to other-oriented perfectionism because no relationship has been found between other-oriented perfectionism and depressed affect.

5. The obsessive-compulsive personality disordered group was expected to react with a greater dysphoria to the videotapes depicting the stressful situations related to socially prescribed perfectionism than was the narcissistic group, the mixed personality disordered group, and the normal control group. No significant differences in mood change were expected between the narcissistic group and the control groups following exposure to the videotapes depicting the stressful situations related to socially prescribed perfectionism.

CHAPTER II

METHOD

Participants

Sixty-one undergraduate women at the University of North Carolina at Greensboro completed the experimental phase of the study. Only women participated in the study to reduce within group variability. Fifty-six students were enrolled in General Psychology. The remaining five students were not enrolled in General Psychology at the time of the study, and were recruited through flyers posted on campus. All participants were under the age of thirty. Fourteen of the women were black; the remaining women were white. Please refer to Table 2 for a summary of demographic characteristics of the participants. Thirty-eight participants received one research participation credit for each of the three experimental sessions. Eight participants received a combination of research participation credit and cash (e.g., if a student needed only two research participation credits, she received five dollars for the third session). Fourteen participants were paid ten dollars for completing the three sessions, and one student received fifteen dollars for completing the three sessions.

Participants were initially screened for the presence of personality disorder symptoms by completing the Structured Clinical Interview for DSM-III-R Personality Disorders Screen (SCID-II Screen; Spitzer, Williams, Gibbon, & First, 1990) either during mass testing over four semesters or administered in small groups by the experimenter.

Participants who fell into one of the following four categories were invited to participate in the experimental phase of the study. Category I students did not meet criteria for any personality disorder on the SCID-II screen. Category II students met criteria for a diagnosis of obsessive-compulsive personality disorder. Students in this category could meet criteria on the screen for any other personality disorder except narcissistic personality disorder. Category III students met criteria for a diagnosis of narcissistic personality disorder. Students in this category could meet criteria on the screen for any other personality disorder except obsessive-compulsive personality disorder. Category IV students met criteria for a diagnosis of one personality disorder or any combination of personality disorders. Some students who met minimal criteria for obsessive-compulsive or narcissistic personality disorder (five of nine DSM-III-R criteria on the SCID Screen) were included in this category if they met a higher proportion of criteria for any other personality disorder or disorders. This decision was made with the high false positive diagnostic rate of the SCID-II Screen in mind.

Initial screening criteria were relatively liberal for the following reason. In a nonclinical population such as that from which study participants were drawn, there is a high rate of false positive diagnoses for personality disorders when the self-report SCID-II Screen is employed. Moreover, there is a low rate of false negative diagnoses (Spitzer, Williams, Gibbon, & First, 1988).

Because the rate of false negative diagnoses is low, students who fell into the no personality disorder category were not interviewed.

These students were invited to participate in the experimental phase of the study based solely upon their responses to the SCID-II Screen, and formed the normal control group.

Due to the fact that the SCID-II Screen yields a high rate of false positive diagnoses, participants who fell into one of the three personality disorder categories were invited to participate in the second phase of screening. Those who accepted were administered the Structured Clinical Interview for DSM-III-R Personality Disorders (SCID-II; Spitzer et al., 1990). Interview participants were asked all questions in each personality disorder category for which they met the minimum number of criteria necessary for a diagnosis on the SCID-II Screen.

The principal investigator administered 44 SCID interviews over a period of five months during the Spring 1994 semester and Summer 1994 semester. One hundred sixty-two SCID interviews were administered by the principal investigator over a period of seven months during the Fall 1995 semester and the Spring 1996 semester. Thus, a total of 206 interviews were conducted by the principal investigator in order to identify the 43 participants for the three personality style groups in the experimental phase of the study. Consent forms and debriefing statements for the SCID interview may be found in Appendices D and E, respectively).

Those interview participants who met the following criteria were invited to participate in the experimental phase of the study. Selection for the experimental phase of the study was based on proportion scores calculated from the students' responses to the SCID-II interview. To be

included in the narcissistic personality style group and the obsessive-compulsive personality style group, participants' proportion scores on either of these two disorders had to exceed .33. Each of the students in these categories were allowed up to two other personality disorder proportion scores of at least .33, provided the participant's presentation of the narcissistic or obsessive-compulsive personality disorder was most prominent. To be included in the mixed personality disorder style control group, students were allowed up to four personality disorder proportion scores which exceeded .33. Participants in this category could also have proportion scores for narcissistic or obsessive-compulsive personality disorders that exceeded .33, provided their proportion scores on one or more other personality disorders exceeded their proportion scores on narcissistic personality disorder or obsessive-compulsive personality disorder, and if their presentation of other personality disorder styles was most prominent during the interview. This decision was made in light of the considerable comorbidity among Axis II disorders. Moreover, in spite of the large number of women interviewed, relatively few of those interviewed earned proportion scores for any personality disorder which exceeded .33.

Proportion scores for each of the personality disorders were calculated in the following manner. The participant's response to each question reflecting the criteria for the disorder of interest was rated by the experimenter. Criteria that were present and clinically significant were rated 1. Criteria that were subthreshold (present but not clinically significant) were rated 0.5. Criteria which were absent were rated 0. After each response was rated, the proportion scores for

the individual responses were added together and divided by the total number of criteria for each disorder to yield an overall proportion score. For example, there are a total of nine criteria for the obsessive-compulsive personality disorder. If a participant's responses to the obsessive-compulsive questions were rated as two criteria present and clinically significant, two criteria subthreshold, and the remaining five criteria absent, she received an overall proportion score of .33 for obsessive compulsive-personality disorder ($(1 + 1 + 0.5 + 0.5) / 9 = .33$).

The number of students who met the above criteria and who were willing to participate in the experimental phase of the study are reported by personality style group as follows. The narcissistic personality style group was comprised of 10 students. The obsessive-compulsive personality style group was comprised of 18 students. The mixed personality disorder style group was comprised of 15 students. The normal control group was comprised of 18 students. Each participant's proportion scores greater than .33 for each of the personality disorders interviewed can be found in Table 3.

Experimental Design

Independent Variables. The present study employed a 4 (personality style) x 3 (dimension of perfectionism) mixed factorial repeated measures design. The first factor, personality style, was the between subjects factor. Participants were assigned to personality style categories on the basis of their responses to the SCID-II Screen (normal control group) or the SCID-II Interview (personality disorder style

groups: narcissistic style, obsessive-compulsive style, mixed personality disorder style control group).

Dimension of perfectionism was the within-subjects factor. The three dimensions of perfectionism were: self-oriented perfectionism, other-oriented perfectionism, and socially prescribed perfectionism. Each participant was exposed to two videotaped scenarios depicting each of the three dimensions of perfectionism. Two scenes in each perfectionism category were used to improve the probability that the experimental stimuli would depict the constructs they were intended to depict. Thus, each participant viewed a total of six videotaped scenarios. The order of presentation of the three types of perfectionism and the two videotapes representing each dimension of perfectionism was counterbalanced across groups.

Dependent Variable. Mood change following exposure to each of the six videotaped scenarios was measured using the Depression Adjective Checklists (DACL; Lubin, 1981). Participants were administered one of the seven forms of the DACL before and after exposure to each scenario. Change scores were calculated for each scenario by subtracting the pre-exposure DACL score from the post-exposure DACL score. This yielded six change scores for each participant, two for each of the three dimensions of perfectionism. The order of presentation of DACL forms was counterbalanced across groups.

Covariates. To control for initial level of depression, the Beck Depression Inventory (BDI; Beck, Ward, Mendelson, Mock, & Erbaugh, 1961) was administered to each participant prior to the experimental phase of the study. Although this was an analogue study, depression is more

likely in personality disordered samples than in non-personality disordered samples. It was therefore decided to control for depression because the responding of non-personality disordered individuals would be compared to that of personality disorder analogues.

To control for individual differences in empathy, the Interpersonal Reactivity Index (IRI; Davis, 1980) was administered to each participant prior to the experimental phase of the study. Participants in the present study were required to identify with the main character in the videotapes, and to respond (by completing a DACL) based upon how they would feel had they experienced these stressful situations. Persons differ in their ability or willingness to empathize with others in the manner required by the present study. The IRI was chosen to control for individual differences in empathy that could have had an impact upon how participants responded to the scenarios because the IRI measures the extent to which one is able to take another's perspective as well as the ability to become imaginatively involved in fictional situations. Another important consideration in using the IRI to control statistically for differences in empathy is that, theoretically, one of the hallmarks of the narcissistic personality disorder is the lack of empathy. It was therefore decided to control for level of empathy because the responding of narcissistic personality disorder analogues would be compared to that of non-narcissistic individuals.

Materials

Screening Measures: Structured Clinical Interview for DSM-III-R Personality Disorders Screen (SCID-II Screen) and Structured Clinical Interview for DSM-III-R (SCID-II). The SCID-II Screen (Spitzer et al., 1990) is a 113-item self-report measure which assesses the presence or absence of personality disorder symptoms. The SCID-II Screen has relatively high inter-item reliability ($r = .85$) and test-retest reliability ($r = .80$) (Leventhal, 1994).

The SCID-II Interview (Spitzer et al., 1990) is administered after the SCID-II Screen has been completed. Interviewees are asked all questions in each of the personality disorder categories for which they have endorsed the minimum number of criteria necessary for a diagnosis. The test-retest reliability of the SCID-II Interview is acceptable ($r = .65$) (Zimmerman, 1994).

Inter-Rater Reliability. Approximately fifty percent ($n = 22$) of the SCID-II interviews of participants in the personality disordered style groups were reassessed by three raters to determine inter-rater reliability. The kappa coefficient was utilized to calculate reliability. This statistic gives the degree to which the interviewer and rater agree, once chance factors have been statistically removed. Table 4 presents the kappa coefficient for each interview rated and the mean, standard deviation, and range for this sample. The average agreement was $K = .5216$, with a standard deviation of .19. Kappa coefficients ranged from .2644 to .8974.

Covariates: Beck Depression Inventory (BDI) and Interpersonal Reactivity Index (IRI). The BDI (Beck, Ward, Mendelson, Mock, & Erbaugh, 1961) was employed to assess baseline level of depression. Any participant who was deemed through the use of this measure to be moderately or severely depressed (i.e., scores of 16 or greater) were not included in the study for ethical reasons. The videotaped scenes depicted potentially stressful situations which could exacerbate depressive symptoms.

The BDI is a 21-item self-report measure. Each of the 21 items contains four statements, each scored from zero to three. Higher scores on the items indicate greater severity of symptoms. An overall score is calculated by summing the score for each item. Scores on the BDI range from zero to 63. Scores ranging from zero to nine indicate that the individual is not depressed. Scores ranging from 10 to 15 indicate that the individual is mildly depressed. Scores ranging from 16 to 23 indicate that the individual is moderately depressed. Scores ranging from 24 to 63 indicate that the individual is severely depressed.

Split-half reliability of the BDI ranges from $r = .58$ to $r = .93$. Test-retest reliability of the BDI ranges from $r = .69$ to $r = .90$. The concurrent validity of the BDI is acceptable. The correlations of clinician's ratings of depression and BDI scores range from $r = .62$ to $r = .77$ (Shaw, Vallis, & McCabe, 1985). A copy of the BDI may be found in Appendix F.

The IRI (Davis, 1980) is a multidimensional measure of empathy comprised of 28 items. Four subscales assess the different dimensions of empathy. The perspective-taking subscale assesses the ability to adopt

another person's point of view. The fantasy subscale assesses the ability to imaginatively place oneself in fictional situations. The empathic concern subscale assesses the ability to experience feelings of warmth and compassion for another person. The personal distress subscale assesses the ability to experience unease in tense interpersonal situations. Total score, which was used in the analyses, determines the individual's overall empathic capacity.

Internal reliability of the IRI ranges from $r = .71$ to $r = .77$. Test-retest reliability of the IRI ranges from $r = .62$ to $r = .71$ (Davis, 1983). A copy of the IRI may be found in Appendix G.

Dependent Measure: Depression Adjective Checklists (DACL). The DACL (Lubin, 1981) is a self report measure of transient dysphoric mood. There are seven alternate forms of the DACL; each checklist is comprised of negatively valenced adjectives and positively valenced adjectives. The overall score is computed by totaling the number of negatively valenced adjectives endorsed and the number of positively valenced adjectives not endorsed.

Before and after exposure to each videotaped scenario, participants were administered a DACL. The order of administration of the forms was counterbalanced across groups. Prior to each administration, the participant was instructed to "check all of the words which indicate how you feel at this particular moment." Mood change scores were calculated by subtracting the pre-exposure DACL score from the post-exposure DACL score.

The split-half reliability of the DACL ranges from $r = .82$ to $r = .93$. The correlations among the seven alternate forms of the DACL range

from $r = .80$ to $r = .93$ (Shaw et al., 1985). A copy of the DACL and its alternate forms may be found in Appendix H.

Videotaped Scenarios

Participants viewed three pairs of videotaped scenarios. Each videotaped scenario depicted a situation in which the female protagonist experienced a stressful event related to one of the three dimensions of perfectionism. Thus, there were two scenes which depicted stressors related to self-oriented perfectionism, two scenes which depicted stressors related to other-oriented perfectionism, and two scenes which depicted stressors related to socially prescribed perfectionism.

Self-oriented perfectionism is characterized by behaviors such as setting unrealistically high goals for oneself and stringent critical appraisal of one's ability to meet such goals. Other-oriented perfectionism is characterized by holding other persons to unreasonably high standards of conduct and performance. Socially prescribed perfectionism is characterized by the beliefs that other persons, particularly significant others, hold one to high standards of conduct and performance and that it is virtually impossible to live up to these standards. Only self-oriented perfectionism and socially prescribed perfectionism have been demonstrated to be associated with depression (Hewitt & Flett, 1993).

The content of the six scenarios was determined from the results of a survey of 91 female General Psychology students. The survey consisted of 28 items reflecting domains of performance. Each participant was asked to rate each item in terms of how important it is to her that she

performs the activity very well and how important it is to others that she perform performs the activity very well. Each participant was also asked to report and rate any activities for which it is important to her that others perform very well. In addition, participants were asked to report and rate any other activities that were not listed in the survey. A copy of the survey and the mean ratings for the categories may be found in Appendix I. The scores for each item endorsed as important or extremely important were totaled, and a mean score for each item was calculated. The two items in each category which received the highest mean scores were used as the basis for the six scenarios.

The protagonist and other performers in the videotaped scenes were recruited from among students in the Cinema and Theater Department at the University of North Carolina at Greensboro. Each performer was auditioned by the investigator. The protagonist, the two performers who played the roles of her female peers, and the performer who played the role of her male peer were undergraduate students, and the actress who played the role of the instructor was a graduate student.

Self-Oriented Perfectionism: Videotape One and Videotape Two. In Scene 1, the protagonist had set the goal of being hired for a particular job for which she was not hired. In Scene 2, the protagonist was unable to meet her goal of losing weight through exercise and nutritionally sound eating habits within a particular period of time she had chosen.

Other-Oriented Perfectionism: Videotape One and Videotape Two. In Scene 1, the protagonist approached her composition instructor for assistance in correcting an essay. The instructor, who had originally

indicated that she would assist the protagonist, was too busy with other work to give the protagonist the amount of help she requested. In Scene 2, the protagonist clearly stated her expectations for a peer's contribution to a joint project. The peer failed to contribute to the project in the manner expected by the protagonist.

Socially Prescribed Perfectionism: Videotape One and Videotape Two.

In Scene 1, the protagonist is depicted in a telephone conversation with her mother. She has not been able to fulfill her mother's expectation for superior academic performance due to carrying a full course load and being required to contribute to funding her education by working part-time. In Scene 2, the protagonist was unable to fulfill her boy friend's expectation that she complete an application to the school of his choice in time to transfer to that school at the time he desired. Copies of all six scripts may be found in Appendix J.

Validation of the Videotaped Scenes

The content validity of the scenarios was rated by three groups. The first group consisted of 19 freshman or sophomore female students enrolled in General Psychology. The second group consisted of 18 junior or senior female students enrolled in Social Psychology. These groups were intended to be similar to participants in the experimental phase of the study. The third group consisted of five graduate students in Clinical Psychology. These graduate students were chosen as raters by virtue of their knowledge of pathological perfectionism and their familiarity with the interface between personality and depression.

Each videotaped scenario was rated on three dimensions by each rater. After viewing each scene, the raters were asked to respond to a questionnaire which assessed scene content. Each scene was rated for the extent to which it depicted the protagonist experiencing a failure to meet an important goal which she had set for herself, experiencing a failure to meet someone else's expectations for her performance, and the extent to which it depicted another person failing to fulfill the protagonist's expectations for the other person's performance. A copy of the rating questionnaire may be found in Appendix K. Table 5 contains the results of the ratings by all three groups, and the highlights of the ratings by the three groups are summarized below.

The results of the ratings by the freshman and sophomore General Psychology students are as follows. Ninety-five percent of these students rated the first self-oriented perfectionism scene as depicting to a great extent the protagonist as failing to meet an important goal she had set for herself. One hundred percent of the students rated the second self-oriented perfectionism tape as depicting to a great extent the protagonist failing to meet an important goal she had set for herself.

Eighty-nine percent of the students rated the first other-oriented perfectionism scene as depicting to a great extent another person failing to meet the protagonist's expectations. One hundred percent of the students rated the second other-oriented perfectionism scene as depicting to a great extent another person failing to meet the protagonist's expectations.

Ninety-five percent of the students rated the first socially prescribed perfectionism scene as depicting to a great extent the protagonist failing to meet another person's expectations for her. Ninety-five percent of the students rated the second socially prescribed perfectionism scene as depicting to a great extent the protagonist failing to meet another person's expectations for her.

The results of the ratings by the junior and senior Social Psychology students are as follows. Ninety-five percent of these students rated the first self-oriented perfectionism scene as depicting to a great extent the protagonist as failing to meet an important goal she had set for herself. One hundred percent of the students rated the second self-oriented perfectionism tape as depicting to a great extent the protagonist failing to meet an important goal she had set for herself.

Eighty-nine percent of the students rated the first other-oriented perfectionism scene as depicting to a great extent another person failing to meet the protagonist's expectations. One hundred percent of the students rated the second other-oriented perfectionism scene as depicting to a great extent another person failing to meet the protagonist's expectations.

One hundred percent of the students rated the first socially prescribed perfectionism scene as depicting to a great extent the protagonist failing to meet another person's expectations for her. Eighty-nine percent of the students rated the second socially prescribed perfectionism scene as depicting to a great extent the protagonist failing to meet another person's expectations for her.

The results of the ratings by the expert graduate students are as follows. One hundred percent of the graduate students rated the first self-oriented perfectionism scene as depicting to a great extent the protagonist as failing to meet an important goal she had set for herself. One hundred percent of the graduate students rated the second self-oriented perfectionism tape as depicting to a great extent the protagonist failing to meet an important goal she had set for herself.

One hundred percent of the graduate students rated the first other-oriented perfectionism scene as depicting to a great extent another person failing to meet the protagonist's expectations. One hundred percent of the graduate students rated the second other-oriented perfectionism scene as depicting to a great extent another person failing to meet the protagonist's expectations.

One hundred percent of the graduate students rated the first socially prescribed perfectionism scene as depicting to a great extent the protagonist failing to meet another person's expectations for her. One hundred percent of the graduate students rated the second socially prescribed perfectionism scene as depicting to a great extent the protagonist failing to meet another person's expectations for her.

Procedure

As reported above, all participants in the experimental phase of the study were first administered the SCID-II Screen. Students who endorsed fewer than the minimum number of criteria needed to indicate the possible presence of any personality disorder and who agreed to participate formed the normal control group. Students whose SCID-II

Screen scores indicated the possible presence of personality disorder(s) in configurations which conformed to the criteria for categories II through IV (reported previously) were administered the SCID-II interview by the principal investigator or another graduate student who had been trained to administer and score the SCID-II interview. Those students whose interview results placed them in one of the three personality disorder style groups were invited to participate.

Prior to the commencement of the experimental phase of the study, students were informed of the procedures, the time commitment required for the study, and the compensation for participation. Those who agreed to participate were given an appointment for the first experimental session. Each student was run individually. The experimental phase was conducted in three separate sessions. At least twenty-four hours elapsed between sessions to control for carryover effects that might have occurred had more than one session been conducted within a twenty-four hour period.

At the beginning of the first experimental session, participants were informed again of the procedures, time commitment, and compensation for participation. Specifically, participants were informed verbally that the study would be run in three sessions on three separate days, and that they would be compensated with three research participation credits and entry into a drawing with a first prize of fifty dollars and a second prize of twenty-five dollars or would receive ten dollars (in one case fifteen dollars) for their participation in lieu of research credits and entry into the drawing. Participants were also informed that they would complete one questionnaire to assess mood prior to the

experiment, that participants would complete one checklist to assess mood prior to and after viewing two short videotaped scenes in each session. The participants were informed that these videotaped scenes would depict a college woman encountering a variety of situations that are not uncommon during the college years. After this verbal overview, participants were given a consent form to read and sign and reminded that they were free to withdraw from the study at any time without penalty. A copy of the consent form can be found in Appendix L.

Videotapes were viewed in blocks of two in each session. Each block consisted of the two scenes depicting stressful situations congruent with one of the three dimensions of perfectionism. The order of presentation was counterbalanced across groups to control for order effects. The order of administration of the Depression Adjective Checklist alternate forms was also counterbalanced across groups to control for order effects.

The first session began with the administration of the Beck Depression Inventory and the Interpersonal Reactivity Index in counterbalanced order. The Beck Depression Inventory was scored immediately. Any participant who received a score of 16 or greater on the Beck Depression Inventory was given a referral, compensated, and excused from the study.

After completing the Beck Depression Inventory, each participant was seated at a table in front of a color television monitor and a VCR. Prior to viewing the first videotaped scene, the participant was given one of the alternate forms of the Depression Adjective Checklist and told "Complete this form by checking all of the words on the list which

apply to how you feel right now."

After the participant had completed the Depression Adjective Checklist, she was told

You will now view a brief videotaped scene. Identify with the main character, put yourself in her place. Imagine that you are in her situation. The same woman will be the main character in every scene. I will point her out to you.

The VCR was then started, and the experimenter pointed to the main character before leaving the room for the duration of the scene. As soon as the scene ended, the experimenter returned and stopped the VCR.

The participant was then given the next Depression Adjective Checklist, and told "Complete this form by checking all of the words on this list which apply to how you would feel if you were in that situation." A five minute break followed during which participants were allowed to read magazines as a distracting task.

The same procedure was followed for the administration of the second videotaped scene viewed in that session. At the end of the session, the participant was informed that she would be debriefed after the third session, and given an appointment for the second session. Sessions 2 and 3 were administered using the same procedure, with one exception. The Beck Depression Inventory and the Interpersonal Reactivity Index were administered in the first session only.

At the conclusion of the third session, the participant was given a debriefing statement which included a list of referrals to read. No participant was given feedback regarding her personality style. The referrals were included in the event that any participant might wish to discuss her personality style in a professional setting. A copy of the debriefing statement can be found in Appendix M.

After the participant read the statement, she was encouraged to ask any questions she might have concerning the study. After the participant's questions were answered, she was thanked and excused.

CHAPTER III

RESULTS

Overview

The dependent variable employed in the present study was change in dysphoric mood, measured using the Depression Adjective Checklist (DACL: Lubin, 1981). DACL measurements were obtained before and after viewing each of the six videotaped scenes. DACL change scores were obtained by subtracting the DACL score taken before each scene was viewed from the DACL score taken after each scene was viewed. Thus, there were six DACL change scores obtained from each participant. All six DACL change scores were used as dependent variables in the two preliminary analyses, which were conducted to determine whether participants responded similarly to the two scenes which represented each dimension of perfectionism and the strength and direction of the relationships among the six dependent variables. Based upon the results of the preliminary analyses, it was determined that for the primary analyses, it would be appropriate to combine the two DACL change scores obtained from the two scenes which represented each of the three dimensions of perfectionism into average DACL change scores. Thus, for the primary analyses, three average DACL change scores were used as the dependent variables.

The present study was a 3 (dimensions of perfectionism) by 4 (personality style) mixed factorial repeated measures design. The within-subjects factor was dimension of perfectionism (self-oriented, other-oriented, and socially prescribed). The between subjects factor

was personality style (narcissistic personality style, obsessive-compulsive personality style, mixed personality disorder style, and normal personality style). The mixed and normal personality style groups served as control groups.

Two covariates, initial level of depression and level of empathy were included in the model. For each analysis, both covariates were significant for at least one of the dependent variables. In a multivariate approach to data analysis, it is the convention to retain covariates in the model if the covariates are significant for one or more of the dependent variables.

A multivariate, rather than a univariate, approach to data analysis was used to take into consideration the correlations among the repeated measures of the dependent variable in testing the hypotheses of interest. If these correlations are not taken into consideration, conclusions drawn from the tests of significance may not be accurate. If the correlations among the dependent variables are ignored, the probability of a Type I error increases. There are two approaches available in SAS to analyze repeated measures designs, the multivariate repeated measures analysis of variance (or covariance) and the multivariate analysis of variance (or covariance) (Freund, Littell, & Spector, 1986). The multivariate analysis of covariance was chosen to analyze the data from the present study because there were insufficient degrees of freedom to employ the multivariate repeated measures analysis of covariance. Therefore, all hypothesis tests were reported in the following manner. First, an overall test of significance, Wilks' Lambda, was reported. This statistic detects whether there are

significant interaction or main effects when all dependent variables are included in the model. Second, contrasts between pairs of levels of the independent factor of interest for each analysis were reported, which compare mean differences in change in level of dysphoria for two different levels of the factor of interest.

Two preliminary analyses were conducted to examine similarities and differences in participants' responses to the pairs of videotapes depicting stress congruent with each of the three dimensions of perfectionism. The first preliminary analysis was a 3 (dimension of perfectionism) by 4 (personality style) multivariate analysis of covariance conducted to determine whether participants responded similarly to pairs of conceptually related videotapes (i.e., there were two videotaped scenes depicting stress congruent with each of the three dimensions of perfectionism). The dependent variables were the six DACL change scores representing change in level of dysphoria related to each of the six videotapes.

The second preliminary analysis was a correlation analysis conducted to determine the strength and direction of the relationships between conceptually related and conceptually unrelated pairs of videotaped scenes, using DACL change scores.

The results of the preliminary analyses indicated that DACL change scores derived from pairs of videotaped scenes depicting each of the three dimensions of perfectionism could be averaged for each subject, with no loss of information. Therefore, the main analyses were conducted using average DACL change scores, one for each of the three dimensions of perfectionism, as the dependent variables.

The primary analyses were: (a) a 3 (dimensions of perfectionism) by 4 (personality style) multivariate analysis of covariance designed to examine the interaction between personality style and stress congruent with each of the three dimensions of perfectionism; (b) a one-way multivariate analysis of covariance designed to examine the effects of stress congruent with each of the three dimensions of perfectionism, regardless of personality style; (c) a series of four one-way multivariate analyses of covariance designed to determine within group differences in response to the three different dimensions of perfectionism for each of the four personality style groups; and (d) individual contrasts between all possible pairs of personality styles in response to each of the three dimensions of perfectionism. Please refer to Table 6 for an overview of hypotheses tested versus results obtained.

For each analysis, the covariates, level of empathy and initial level of depression, were significant for at least one of the dependent variables. For this reason, the covariates were retained in the model in every analysis and all means reported in the text are adjusted means. Please refer to Table 7 for a summary of the covariate results for all analyses.

Preliminary Analysis: Videotape Effects

For each of the three types of perfectionism, there were two different videotaped scenes. To determine whether there were significant differences between the two videotaped scenes designed to depict stress congruent with each of the three dimensions of perfectionism (self-oriented perfectionism, other-oriented perfectionism, and socially-prescribed perfectionism), a 3 (perfectionism dimension) X 4

(participant personality style) multivariate analysis of covariance was conducted. The covariates were level of empathy and level of depression. Level of empathy was significant for self-oriented perfectionism Videotape 1, $F(1, 55) = 7.27, p = .0093$, and self-oriented perfectionism Videotape 2, $F(1, 55) = 12.26, p = .0009$. Level of depression was significant for self-oriented perfectionism Videotape 1, $F(1, 55) = 9.09, p = .0039$. For this reason, the covariates were retained in the model. (Neither covariate was significant for the other-oriented perfectionism videotapes and the socially prescribed perfectionism videotapes).

The dependent variables were the DACL change scores for self-oriented perfectionism Videotapes 1 and 2, other-oriented perfectionism Videotapes 1 and 2, and socially prescribed perfectionism Videotapes 1 and 2. The DACL change scores for each videotape were calculated by subtracting the DACL score obtained prior to viewing the videotape from the DACL score obtained after viewing the videotape. Thus, for each participant, six DACL change scores, two for each of the three dimensions of perfectionism, were obtained.

It was predicted that there would be no significant difference between the two videotaped scenes depicting each of the three dimensions of perfectionism. The results of the overall test of significance revealed that there was at least one significant difference between the pairs of videotaped scenes depicting each of the three dimensions of perfectionism, $F(3, 53) = 5.82, p = .0016$. For a summary of this analysis, please see Table 8 in Appendix A. Contrasts between pairs of the three dimensions of perfectionism were then examined.

The first contrast indicated that, contrary to what was expected, there was a significant difference between the two scenes which depicted stress congruent with self-oriented perfectionism, $F(1, 55) = 16.41$, $p = .0002$. The mean DACL change score for Scene 1 was 10.58, whereas the mean DACL change score for Scene 2 was 8.69. This result suggests that participants reacted with significantly less dysphoria when presented with Scene 2 than when presented with Scene 1.

Consistent with what was expected, no significant difference was found between the two scenes which depicted stress congruent with other-oriented perfectionism, $F(1, 55) = 0.40$, $p = .5312$. The mean DACL change score for scene one was 10.84, and the mean DACL change score for scene two was 10.45. This result suggests that participants reacted with similar levels of dysphoria when presented with Scene 1 and when presented with Scene 2.

Also consistent with what was expected, no significant difference was found between the two scenes which depicted stress congruent with socially prescribed perfectionism, $F(1, 55) = 1.06$, $p = .3067$. The mean DACL change score for Scene 1 was 12.67, and the mean DACL change score for Scene 2 was 12.06. These results suggest that participants reacted with similar levels of dysphoria when presented with Scene 1 and with Scene 2.

Preliminary Analysis: Correlations among DACL Change Scores for Scenes Depicting Dimensions of Perfectionism

A correlation analysis was conducted to determine the strength and the direction of the relationships among the DACL change scores for the

six videotaped scenes depicting stress congruent with the dimensions of perfectionism. It was expected that the correlation between the two videotaped scenes depicting a particular dimension of perfectionism would be stronger than the correlations between videotaped scenes depicting different dimensions of perfectionism. Please refer to Table 9 for a summary of this analysis.

As expected, the two scenes depicting stress congruent with self-oriented perfectionism were strongly positively correlated with one another, $r = .8291$, $n = 61$, $p = .0001$. Also as expected, the two scenes depicting stress congruent with other-oriented perfectionism were strongly positively correlated with one another, $r = .6623$, $n = 61$, $p = .0001$. Consistent with what was expected, the two scenes depicting stress congruent with socially prescribed perfectionism were strongly positively correlated with one another, $r = .7544$, $n = 61$, $p = .0001$.

In summary, this analysis revealed that the strongest correlations were between conceptually related sets of scenes. Moderate, positive correlations were, however, found between scenes depicting two different dimensions of perfectionism in every case. Thus, although the repeated measures analysis of covariance indicated that the two scenes depicting stress congruent with self-oriented perfectionism were significantly different, the correlation analysis indicated that participants responded more similarly to the two self-oriented perfectionism scenes than they responded to to any other scene depicting stress congruent with another dimension of perfectionism. The results of this correlation analysis support Hewitt and Flett's contention that perfectionism should be conceptualized as a multidimensional, rather

than a unitary, construct. Moreover, these results indicate that although different from one another, the dimensions of perfectionism are at least moderately related to one another.

Based upon the results of the multivariate analysis of the videotape effects and the correlation analysis, further analyses were conducted two parts. In one group of analyses, the self-oriented perfectionism average DACL change score was used as one of the dependent variables, along with the other-oriented perfectionism average DACL change score and the socially prescribed perfectionism average DACL change score. The other group of analyses was conducted using (a) change score derived from the first self-oriented perfectionism scene, the other-oriented perfectionism average change score, and the socially prescribed perfectionism average change score, and (b) the change score derived from the second self-oriented perfectionism scene, the other-oriented perfectionism average change score, and the socially prescribed perfectionism average change score.

A comparison of the results of these two sets of analyses indicated that results were similar, regardless of whether the dependent variables for self-oriented perfectionism Videotapes 1 and 2 were averaged or compared separately with the average dependent variable for other-oriented perfectionism or socially prescribed perfectionism. Moreover, the correlations showed that participants responded more similarly to the two videotapes within each of the three dimensions than to pairs of videotapes from either of the two different dimensions of perfectionism. For these reasons, only the analyses using the averaged dependent variables for all three dimensions of perfectionism were reported. In

these analyses, the two mean DACL change scores for the two videotapes from each dimension of perfectionism were averaged. This yielded three average mean DACL change scores for each subject, one for each dimension of perfectionism.

Interaction between the Within Subjects Factor (Dimension of Perfectionism) and the Between Subjects Factor (Participant Personality Style)

This analysis was conducted to determine whether level of dysphoria (as measured by average mean DACL change scores) varied for the different participant personality styles across the dimensions of perfectionism, which tested the main hypotheses of this study. A 3 (perfectionism dimension) by 4 (participant personality style) multivariate analysis of covariance was conducted to detect the interaction. The covariates were level of empathy and level of depression. Level of empathy was significant for self-oriented perfectionism, $F(1, 55) = 10.67, p = .0019$. Level of depression was also significant for self-oriented perfectionism, $F(1, 55) = 6.37, p = .0145$. For this reason, the covariates were retained in the model. (Neither covariate was significant for other-oriented perfectionism or socially prescribed perfectionism).

It was expected that there would an interaction between participant personality style and self-oriented perfectionism. Specifically, it was predicted that participants with the narcissistic and obsessive compulsive personality styles would respond with greater dysphoria to stress congruent with self-oriented perfectionism than would

participants in the mixed personality style control group and participants in the normal control group. Moreover, it was predicted that participants in the narcissistic personality style group would respond with greater dysphoria than participants in the obsessive-compulsive personality style group to stress congruent with self-oriented perfectionism. No differences in the level of dysphoria across the different dimensions of perfectionism were expected for participants in the two control groups.

No interaction between participant personality style and other-oriented perfectionism was expected. That is, it was predicted that participants in all four personality style groups would respond with similar levels of dysphoria to stress congruent with other-oriented perfectionism.

It was expected that there would be an interaction between participant personality style and socially prescribed perfectionism. It was predicted that participants in the obsessive-compulsive personality style group would respond with higher levels of dysphoria than participants in the other three groups to stress congruent with socially prescribed perfectionism. No differences among the other three personality style groups in level of dysphoria were expected in response to stress congruent with socially prescribed perfectionism.

The results of the overall test of significance for the interaction between participant personality style and dimension of perfectionism indicated no overall significant interaction, $F(6, 108) = 1.07$, $p = .3818$, contrary to what was expected. Separate contrasts were conducted to more closely depict differences among pairs of dimensions of

perfectionism for the four personality style groups. For a summary of this analysis, please refer to Table 10. Table 11 contains the adjusted means for this analysis. Figure 1 provides an illustration of this analysis.

More specifically, no significant interaction between participant personality style and dimension of perfectionism was detected when self-oriented perfectionism and other-oriented perfectionism were contrasted, $F(3, 55) = 0.96, p = .4199$. No significant interaction between participant personality style and dimension of perfectionism was detected when self-oriented perfectionism and socially prescribed perfectionism were contrasted, $F(3, 55) = 2.04, p = .1186$. When other-oriented perfectionism and socially prescribed perfectionism were contrasted, no significant interaction between participant personality style and dimension was detected, $F(3, 55) = 0.40, p = .7505$.

This analysis detected no significant interaction between participant personality style and dimension of perfectionism, contrary to what was expected. The results of this analysis suggest that participants, regardless of personality style, responded with similar changes in level of dysphoria across the different dimensions of perfectionism.

Effect of Dimension of Perfectionism

In order to determine whether there were differences among the three dimensions of perfectionism (self-oriented, other-oriented, and socially prescribed), a multivariate analysis of covariance was conducted. The covariates were level of empathy and level of depression. Level of empathy was significant for self-oriented

perfectionism, $F(1, 55) = 10.67, p = .0019$. Level of depression was also significant for self-oriented perfectionism, $F(1, 55) = 6.37, p = .0145$. For this reason, the covariates were retained in the analysis. (Neither covariate was significant for other-oriented perfectionism or socially prescribed perfectionism).

It was expected that participants would respond with higher and similar levels of dysphoria to stress congruent with self-oriented perfectionism and socially prescribed perfectionism than they would to stress congruent with other-oriented perfectionism. Self-oriented perfectionism and socially prescribed perfectionism have been demonstrated to be associated with depression, whereas other-oriented perfectionism has not (Blatt, 1995; Hewitt & Flett, 1993).

The results of the overall test of significance for the comparisons among self-oriented perfectionism, other-oriented perfectionism, and socially prescribed perfectionism indicated the presence of at least one significant difference, $F(2, 54) = 5.55, p = .0064$. Separate contrasts were then made to determine the difference between each pair of dimensions of perfectionism. For a summary of this analysis, please refer to Table 12. The results of the first contrast indicated no significant difference in level of dysphoria in response to exposure to stress congruent with self-oriented perfectionism and stress congruent with other-oriented perfectionism, $F(1, 55) = 1.67, p = .2014$, contrary to what was expected. The adjusted mean DACL change score for self-oriented perfectionism was 9.64, and the adjusted mean DACL change score for other-oriented perfectionism was 10.65.

The results of the second contrast indicated a significant difference in dysphoria level in response to stress congruent with self-oriented perfectionism and stress congruent with socially prescribed perfectionism, $F(1, 55) = 11.14$, $p = .0015$, contrary to what was expected. The adjusted mean DACL change score for self-oriented perfectionism was 9.64, and the adjusted mean DACL change score for socially prescribed perfectionism was 12.36.

The third contrast indicated a significant difference in level of dysphoria in response to stress congruent with other-oriented perfectionism and stress congruent with socially prescribed perfectionism, $F(1, 55) = 4.55$, $p = .0374$, as expected. The adjusted mean DACL change score for other-oriented perfectionism was 10.65, and the adjusted mean DACL change score for socially prescribed perfectionism was 12.36.

It was expected that participants as a single group would respond with more and similar dysphoria to stress congruent with self-oriented perfectionism and stress congruent with socially prescribed perfectionism than they would to stress congruent with other-oriented perfectionism.

Contrasts between self-oriented perfectionism and other-oriented perfectionism indicated that the levels of dysphoria experienced by participants in response to stress congruent with these two dimensions of perfectionism were similar in magnitude, which was unexpected. Contrasts between self-oriented perfectionism and socially prescribed perfectionism indicated that participants responded with higher levels of dysphoria to stress congruent with socially prescribed perfectionism

than to stress congruent with self-oriented perfectionism, contrary to what was expected. When other-oriented perfectionism and socially prescribed perfectionism were contrasted, it was discovered that participants responded with higher levels of dysphoria to stress congruent with socially prescribed perfectionism than to stress congruent with other-oriented perfectionism, as expected.

Within Group Differences in Perfectionism for Each Group

This set of one-way multivariate analyses of covariance was conducted to determine whether participants in each of the four personality style groups experienced different levels of mood change in response to stress congruent with each of the three different dimensions of perfectionism. The covariates were level of empathy and level of depression. Level of empathy was significant for self-oriented perfectionism, $F(2, 7) = 21.78, p = .0023$, and for socially prescribed perfectionism, $F(2, 7) = 40.71, p = .0004$. Level of depression was also significant for self-oriented perfectionism, $F(2, 7) = 6.50, p = .0381$, and for socially prescribed perfectionism, $F(2, 7) = 14.46, p = .0067$. For this reason, the covariates were retained in the model. (Neither covariate was significant for other-oriented perfectionism).

In order to present a more interpretable analysis of within group differences for each of the personality style groups, adjusted means were calculated upon a centered intercept, rather than an intercept passed through the origin. Adjusted means for this analysis are presented in Table 13.

Narcissistic Personality Style Group

It was predicted that participants in the narcissistic personality style group would respond with greater dysphoria to the stress congruent with self-oriented perfectionism than they would to the stress congruent with either other-oriented perfectionism or socially prescribed perfectionism.

The results of the overall test of significance indicated the presence of at least one significant difference in mood change, $F(2, 6) = 7.27$, $p = .0249$. Individual contrasts were then conducted. For a summary of this analysis, please refer to Table 14.

The results of the first contrast indicated that women in the narcissistic personality style group did not respond significantly differently to stress congruent with self-oriented perfectionism and stress congruent with other-oriented perfectionism, $F(1, 7) = 1.79$, $p = .2230$. The adjusted mean DACL change score for self-oriented perfectionism was 9.36, and the adjusted mean DACL change score for other-oriented perfectionism was 11.35.

A significant difference in mood change was detected when stress congruent with self-oriented perfectionism and socially prescribed perfectionism were contrasted, $F(1, 7) = 12.77$, $p = .0090$, as expected. An examination of the mean DACL change scores, however, indicated that the difference in mood change was in the opposite direction to what was expected. The adjusted mean DACL change score for self-oriented perfectionism was 9.36, whereas the adjusted mean DACL change score for socially prescribed perfectionism was 15.07.

No significant difference in mood change was detected when stress congruent with other-oriented perfectionism and socially prescribed perfectionism were contrasted, $F(1, 7) = 2.44, p = .1619$, as expected. The adjusted mean DACL change score for other-oriented perfectionism was 11.35, and the adjusted mean DACL change score for socially prescribed perfectionism was 15.07.

In summary, the results of this analysis indicated that participants in the narcissistic personality style group experienced similar levels of dysphoria in response to stress congruent with self-oriented perfectionism and stress congruent with other-oriented perfectionism. It had been predicted that narcissistic participants would respond with greater dysphoria to stress congruent with self-oriented perfectionism than to stress congruent with other-oriented perfectionism. In addition, narcissists responded with greater dysphoria in response to stress congruent with socially prescribed perfectionism than to stress congruent with self-oriented perfectionism, contrary to what had been predicted. It had been predicted that participants in this group would respond with higher levels of dysphoria to stress congruent with self-oriented perfectionism than to stress congruent with socially prescribed perfectionism. Finally, participants in this group responded with similar levels of dysphoria to stress congruent with other-oriented perfectionism and socially prescribed perfectionism, as expected.

Obsessive-Compulsive Personality Style Group

It was predicted that participants in this group would respond with greater dysphoria to stress congruent with self-oriented perfectionism

than to stress congruent with other-oriented perfectionism, and would respond with greater dysphoria to stress congruent with socially prescribed perfectionism than to stress congruent with other-oriented perfectionism. No difference in level of dysphoria was expected for this group when exposed to stress congruent with self-oriented perfectionism and stress congruent with socially prescribed perfectionism.

The results of the overall test of significance indicated no overall significant differences, $F(2, 14) = 1.53$, $p = .2513$. Individual contrasts were conducted to more closely examine differences between pairs of perfectionism dimensions. For a summary of this analysis, please refer to Table 14.

No significant difference in mood change was detected when stress congruent with self-oriented perfectionism and other-oriented perfectionism were contrasted, $F(1, 15) = 1.59$, $p = .2265$, contrary to what was expected. The adjusted mean DACL change score for self-oriented perfectionism was 8.15, and the adjusted mean DACL change score for other-oriented perfectionism was 10.10.

The results of the second contrast indicated that participants in the obsessive-compulsive group responded with similar levels of dysphoria to stress congruent with self-oriented perfectionism and stress congruent with socially prescribed perfectionism, $F(1, 15) = 3.08$, $p = .0996$, as expected. The adjusted mean DACL change score for self-oriented perfectionism was 8.15, and the adjusted mean DACL change score for socially prescribed perfectionism was 11.01.

No difference in mood change was detected when other-oriented perfectionism and socially prescribed perfectionism were contrasted,

$F(1, 15) = 0.33, p = .5747$, contrary to what was expected. The adjusted mean DACL change score for other-oriented perfectionism was 10.10, and the adjusted mean DACL change score for socially prescribed perfectionism was 11.01.

In summary, the results of this analysis indicated that participants in the obsessive-compulsive personality style group experienced similar changes in levels of dysphoria in response to stress congruent with self-oriented perfectionism and stress congruent with other-oriented perfectionism. It had been predicted that participants in this group would respond with greater dysphoria in response to stress congruent with self-oriented perfectionism than to stress congruent with other-oriented perfectionism. In addition, it was found that participants in this group responded similarly to stress congruent with self-oriented perfectionism and socially prescribed perfectionism, as was predicted. Finally, participants in the obsessive-compulsive personality style group responded similarly to stress congruent with other-oriented perfectionism and stress congruent with socially prescribed perfectionism. It had been predicted that participants in this group would respond with greater dysphoria to stress congruent with socially prescribed perfectionism than to stress congruent with other-oriented perfectionism.

Mixed Personality Disorder Style Control Group

No specific predictions were made concerning differences in change in level of dysphoria when members of this control group were exposed to stress congruent with each of the three dimensions of perfectionism.

The results of the overall test of significance indicated no overall differences, $F(2, 11) = 0.08$, $p = .9234$. Individual contrasts were conducted between pairs of perfectionism dimensions. For a summary of this analysis, please refer to Table 14.

The first contrast indicated no significant difference in mood change when participants in the mixed personality disorder control group were exposed to stress congruent with self-oriented perfectionism and stress congruent with other-oriented perfectionism, $F(1, 12) = 0.17$, $p = .6870$. The adjusted mean DACL change score for self-oriented perfectionism was 12.09, and the adjusted mean DACL change score for other-oriented perfectionism was 11.29.

No significant difference in mood change was detected when participants were exposed to stress congruent with self-oriented perfectionism and stress congruent with socially prescribed perfectionism, $F(1, 12) = 0.07$, $p = .7889$. The adjusted mean DACL change score for self-oriented perfectionism was 12.09, and the adjusted mean DACL change score for socially prescribed perfectionism was 11.53.

No significant difference in mood change was detected when stress congruent with other-oriented perfectionism and socially prescribed perfectionism were contrasted, $F(1, 12) = 0.03$, $p = .8622$. The adjusted mean DACL change score for other-oriented perfectionism was 11.29, and the adjusted mean DACL change score for socially prescribed perfectionism was 11.53.

In summary, participants in the mixed personality style control group responded with similar changes in levels of dysphoria to stress congruent with each of the three dimensions of perfectionism.

Normal Personality Style Control Group

No specific predictions were made concerning differences in change in level of dysphoria when members of this control group were exposed to stress congruent with each of the three dimensions of perfectionism.

The results of the overall test of significance indicated no overall differences, $F(2, 14) = 0.91$, $p = .4245$. Individual contrasts were conducted between pairs of perfectionism dimensions. For a summary of this analysis, please refer to Table 14.

The first contrast indicated no significant difference in mood change when participants were exposed to stress congruent with self-oriented perfectionism and stress congruent with other-oriented perfectionism, $F(1, 15) = 0.05$, $p = .8205$. The adjusted mean DACL change score for self-oriented perfectionism was 10.47, and the adjusted mean DACL change score for other-oriented perfectionism was 10.80.

When self-oriented perfectionism and socially prescribed perfectionism were contrasted, no significant difference in mood change was detected, $F(1, 15) = 1.88$, $p = .1900$. The adjusted mean DACL change score for self-oriented perfectionism was 10.47, and the adjusted mean DACL change score for socially prescribed perfectionism was 12.16.

No significant difference in mood change was detected when stress congruent with other-oriented perfectionism and socially prescribed perfectionism were contrasted, $F(1, 15) = 0.79$, $p = .3872$. The adjusted mean DACL change score for other-oriented perfectionism was 10.80, and the adjusted mean DACL change score for socially prescribed perfectionism was 12.16.

In summary, participants in the normal personality style control group responded with similar changes in levels of dysphoria to stress congruent with each of the three dimensions of perfectionism.

Contrasts between Pairs of Participant Personality Styles for Each of the Three Dimensions of Perfectionism

In order to more closely examine differences between groups across the three different dimensions of perfectionism, specific contrasts between pairs of participant personality style groups were made for each dimension of perfectionism.

Contrasts between pairs of personality style groups for self-oriented perfectionism, other-oriented perfectionism, and socially prescribed perfectionism are based upon the averages of the two videotaped scenes for each of the dimensions of perfectionism.

The covariates were level of empathy and level of depression. Level of empathy was significant for self-oriented perfectionism, $F(1, 55) = 10.67$, $p = .0019$. Level of depression was also significant for self-oriented perfectionism, $F(1, 55) = 6.37$, $p = .0145$. For this reason, the covariates were retained in the model. (Neither covariate was significant for other-oriented perfectionism or socially prescribed perfectionism).

Overall Test of Significance for Comparisons Between Pairs of Personality Styles for Each of the Three Dimensions of Perfectionism

The results of the overall test of significance for this set of analyses indicated no overall differences between pairs of personality

styles for the three dimensions of perfectionism, $F(9, 129) = 0.90$, $p = .5285$. Please refer to Table 15 for a summary of this analysis.

Self-Oriented Perfectionism

It was predicted that, when exposed to stress congruent with self-oriented perfectionism, participants in the narcissistic group would experience higher levels of dysphoria than participants in the obsessive-compulsive, mixed, and normal personality style groups. It was also predicted that, when exposed to stress congruent with self-oriented perfectionism, participants in the obsessive-compulsive group would experience higher levels of dysphoria than participants in the mixed and the normal personality style groups. Finally, it was predicted that participants in the mixed personality disorder style group and participants in the normal personality style group would not differ in the levels of dysphoria experienced after exposure to stress congruent with self-oriented perfectionism.

The first contrast compared participants with the narcissistic personality style and participants with the obsessive-compulsive personality style for change in level of dysphoria after viewing the videotaped scenes depicting self-oriented perfectionism. No significant difference between the two groups was detected, $F(1, 55) = 0.25$, $p = .6182$, contrary to what was expected. The adjusted mean DACL change score for the narcissistic personality style group was 8.72, whereas the adjusted mean DACL change score for the obsessive-compulsive style group was 7.65.

The second contrast compared participants with the narcissistic personality style and participants in the mixed personality disorder

style control group for change in level of dysphoria after viewing the videotaped scenes depicting self-oriented perfectionism. No significant difference between the two groups was detected, $F(1, 55) = 1.86$, $p = .1783$, contrary to what was expected. The adjusted mean DACL change score for the narcissistic style group was 8.72, whereas the adjusted mean DACL change score for the mixed personality style control group was 11.71.

The third contrast compared participants with the narcissistic personality style and participants in the normal control group for change in level of dysphoria after viewing the videotaped scenes depicting self-oriented perfectionism. No significant difference between the two groups was detected, $F(1, 55) = 0.67$, $p = .4173$, contrary to what was expected. The adjusted mean DACL change score for the narcissistic style group was 8.72, whereas the adjusted mean DACL change score for the normal control group was 10.48.

The fourth contrast compared participants with the obsessive-compulsive personality style and participants with the participants of the mixed personality disorder control group for change in level of dysphoria after viewing the videotaped scenes depicting self-oriented perfectionism. A significant difference between the two groups was detected, $F(1, 55) = 4.55$, $p = .0375$. The difference, however, was in the opposite direction to what was expected. The adjusted mean DACL change score for the obsessive-compulsive style group was 7.65, whereas the adjusted mean DACL change score for the mixed personality style group was 11.71.

The fifth contrast compared participants with the obsessive-compulsive personality style and participants from the normal control group for change in level of dysphoria after viewing the videotaped scenes depicting self-oriented perfectionism. No significant difference between the two groups was detected, $F(1, 55) = 2.40$, $p = .1269$, contrary to what was expected. The adjusted mean DACL change score for the obsessive-compulsive style group was 7.65, whereas the adjusted mean DACL change score for the normal control group was 10.48.

The sixth contrast compared participants from the mixed personality disorder style control group and participants from the normal personality control group for change in level of dysphoria after viewing the videotaped scenes depicting self-oriented perfectionism. No significant difference between the two groups was detected, $F(1, 55) = 0.41$, $p = .5234$. The adjusted mean DACL change score for the mixed personality style control group was 11.71, whereas the adjusted mean DACL change score for the normal control group was 10.48.

In summary, the results of this set of contrasts between pairs of personality style groups for changes in level of dysphoria when exposed to stress congruent with self-oriented perfectionism indicated that, contrary to what was predicted, participants in the narcissistic personality style group did not respond with higher change in levels of dysphoria than did participants in the other three personality style groups.

In addition, participants in the obsessive-compulsive personality style group responded with lower change in level of dysphoria to stress congruent with self-oriented perfectionism than participants in the

mixed personality disorder control group. It had been predicted that obsessive-compulsive participants would respond with higher change in level of dysphoria than would participants in the mixed personality disorder control group. The comparison of the obsessive-compulsive group with the normal personality control group indicated no difference in change in the level of dysphoria experienced by participants in these two groups when exposed to stress congruent with self-oriented perfectionism. It had been predicted that participants in the obsessive-compulsive group would respond with higher change in the level of dysphoria than would participants in the normal control group.

Finally, participants in the mixed personality disorder control group and the normal personality control group responded with similar changes in the level of dysphoria to stress congruent with self-oriented perfectionism, as expected.

Other-Oriented Perfectionism

It was predicted that, when exposed to stress congruent with other-oriented perfectionism, participants regardless of personality style would not differ in the level of dysphoria experienced.

The first contrast compared participants with the narcissistic personality style and participants with the obsessive-compulsive personality style for change in level of dysphoria after viewing the videotaped scenes depicting other-oriented perfectionism. As expected, no significant difference was detected, $F(1, 55) = 0.21$, $p = .6463$. The adjusted mean DACL change score for the narcissistic style group was 10.94, whereas the adjusted mean DACL change score for the obsessive-compulsive style group was 9.99.

The second contrast compared participants with the narcissistic personality style and participants in the mixed personality disorder style control group for change in level of dysphoria after viewing the videotaped scenes depicting other-oriented perfectionism. As expected, no significant difference was detected, $F(1, 55) = 0.00$, $p = .9665$. The adjusted mean DACL change score for the narcissistic style group was 10.94, whereas the adjusted mean DACL change score for the mixed personality style control group was 11.02.

The third contrast compared participants with the narcissistic personality style and participants in the normal control group for change in level of dysphoria after viewing the videotaped scenes depicting other-oriented perfectionism. As expected, no significant difference was detected, $F(1, 55) = 0.02$, $p = .8833$. The adjusted mean DACL change score for the narcissistic style group was 10.94, whereas the adjusted mean DACL change score for the normal control group was 10.63.

The fourth contrast compared participants with the obsessive-compulsive personality style and participants with the participants of the mixed personality disorder control group for change in level of dysphoria after viewing the videotaped scenes depicting other-oriented perfectionism. As expected, no significant difference was detected, $F(1, 55) = 0.32$, $p = .5733$. The adjusted mean DACL change score for the obsessive-compulsive style group was 9.99, whereas the adjusted mean DACL change score for the mixed personality style control group was 11.02.

The fifth contrast compared participants with the obsessive-compulsive personality style and participants from the normal control group for change in level of dysphoria after viewing the videotaped scenes depicting other-oriented perfectionism. As expected, no significant difference was detected, $F(1, 55) = 0.13$, $p = .7154$. The adjusted mean DACL change score for the obsessive-compulsive personality style group was 9.99, whereas the adjusted mean DACL change score for the normal control group was 10.63.

The sixth contrast compared participants from the mixed personality disorder style control group and participants from the normal personality control group for change in level of dysphoria after viewing the videotaped scenes depicting other-oriented perfectionism. As expected, no significant difference was detected, $F(1, 55) = 0.05$, $p = .8314$. The adjusted mean DACL change score for the mixed personality style control group was 11.02, whereas the adjusted mean DACL change score for the normal control group was 10.63.

In summary, the results of this set of contrasts between pairs of personality style groups for changes in level of dysphoria indicated that participants in the four personality style groups responded with similar changes in level of dysphoria to stress congruent with other-oriented perfectionism, as was expected.

Socially Prescribed Perfectionism

It was predicted that, when exposed to stress congruent with socially prescribed perfectionism, participants in the obsessive-compulsive personality style group would respond with greater change in

level of dysphoria than participants in the narcissistic, mixed, and normal personality style groups. It was also predicted that participants in the narcissistic, mixed, and normal personality style groups would not differ in the level of dysphoria experienced after exposure to stress congruent with socially prescribed perfectionism.

The first contrast compared participants with the narcissistic personality style and participants with the obsessive-compulsive personality style for change in level of dysphoria after viewing the videotaped scenes depicting socially prescribed perfectionism. Contrary to what was expected, no significant difference was detected, $F(1, 55) = 1.27, p = .2642$. The adjusted mean DACL change score for the narcissistic style group was 14.12, whereas the adjusted mean DACL change score for the obsessive-compulsive style group was 11.51.

The second contrast compared participants with the narcissistic personality style and participants in the mixed personality disorder style control group for change in level of dysphoria after viewing the videotaped scenes depicting socially prescribed perfectionism. As expected, there was no difference in the level of dysphoria experienced by the two groups, $F(1, 55) = 1.23, p = .2714$. The adjusted mean DACL change score for the narcissistic style group was 14.12, whereas the adjusted mean DACL change score for the mixed personality style control group was 11.48.

The third contrast compared participants with the narcissistic personality style and participants in the normal control group for change in level of dysphoria after viewing the videotaped scenes depicting socially prescribed perfectionism. As expected, there was no

difference in the level of dysphoria experienced by the two groups, $F(1, 55) = 0.59, p = .4473$. The adjusted mean DACL change score for the narcissistic style group was 14.12, whereas the adjusted mean DACL change score for the normal control group was 12.33.

The fourth contrast compared participants with the obsessive-compulsive personality style and participants with the participants of the mixed personality disorder control group for change in level of dysphoria after viewing the videotaped scenes depicting socially prescribed perfectionism. Contrary to what was expected, there was no difference in the level of dysphoria experienced by the two groups, $F(1, 55) = 0.00, p = .9904$. The adjusted mean DACL change score for the obsessive-compulsive style group was 11.51, whereas the adjusted mean DACL change score for the mixed personality style control group was 11.48.

The fifth contrast compared participants with the obsessive-compulsive personality style and participants from the normal control group for change in level of dysphoria after viewing the videotaped scenes depicting socially prescribed perfectionism. Contrary to what was expected, there was no difference in the level of dysphoria experienced by the two groups, $F(1, 55) = 0.18, p = .6768$. The adjusted mean DACL change score for the obsessive-compulsive style group was 11.51, whereas the adjusted mean DACL change score for the normal control group was 12.33.

The sixth contrast compared participants from the mixed personality disorder style control group and participants from the normal personality control group for change in level of dysphoria after viewing

the videotaped scenes depicting socially prescribed perfectionism. As expected, there was no difference in the level of dysphoria experienced by the two groups, $F(1, 55) = 0.17, p = .6823$. The adjusted mean DACL change score for the mixed personality style control group was 11.48, whereas the adjusted mean DACL change score for the normal control group was 12.33.

In summary, the results of this set of contrasts between pairs of personality style groups for changes in level of dysphoria when exposed to stress congruent with socially oriented perfectionism indicated that participants in the narcissistic personality style group and obsessive-compulsive personality style group responded with similar changes in level of dysphoria. It had been predicted that participants in the obsessive-compulsive group would respond with higher change in level of dysphoria than participants in the narcissistic group.

In addition, it was found that participants in the narcissistic group and participants in the mixed personality control group responded with similar changes in level of dysphoria to stress congruent with socially prescribed perfectionism, as expected. Participants in the narcissistic personality style group and participants in the normal personality control group also responded with similar changes in level of dysphoria to stress congruent with socially prescribed perfectionism, as expected.

Participants in the obsessive-compulsive personality style group and participants in the mixed personality style control group responded with similar changes in level of dysphoria to stress congruent with socially prescribed perfectionism. It had been predicted that

participants in the obsessive-compulsive group would respond with greater change in level of dysphoria than participants in the mixed personality style group.

Participants in the obsessive-compulsive personality style group and participants in the normal personality style group responded with similar changes in level of dysphoria to stress congruent with socially prescribed perfectionism. It had been predicted that participants in the obsessive-compulsive group would respond with greater change in level of dysphoria than participants in the normal personality style group.

Finally, participants in the mixed personality style groups and participants in the normal personality style responded with similar changes in level of dysphoria to stress congruent with socially prescribed perfectionism, as predicted.

CHAPTER IV

DISCUSSION

The vulnerability hypothesis is one among many models which have been proposed to explain the relationship between personality and depression. According to this hypothesis, personality can be considered a diathesis which renders certain individuals vulnerable to becoming depressed following exposure to stress. The specificity hypothesis, a corollary of the vulnerability hypothesis, proposes that it is the interaction between a certain personality diathesis and stress congruent with that personality diathesis which produces depression.

The present study examined the hypothesized interaction between stress congruent with each of the three dimensions of perfectionism (self-oriented, other-oriented, and socially prescribed) described by Hewitt and Flett (1990) and pathological perfectionism in persons with a narcissistic personality disorder style and in persons with an obsessive-compulsive personality disorder style. The narcissistic and obsessive-compulsive personality disorder styles were chosen because pathological perfectionism is considered characteristic of individuals with the narcissistic personality disorder and persons with the obsessive-compulsive personality disorder (Akhtar & Thompson, 1982; DSM-IV, 1994; Guidano & Liotti, 1983; Ingram, 1982; Sorotzkin, 1985).

Predictions and Findings

The main hypothesis tested in the present study was that perfectionistic personality characteristics and stress congruent with

the three dimensions of perfectionism would interact to produce dysphoria in persons with a narcissistic personality disorder style and in persons with an obsessive-compulsive personality disorder style. There would be different patterns of dysphoria when these two groups were compared to one another and compared to two control groups.

Theoretical and clinical descriptions of the obsessive-compulsive personality style indicate that persons with this disorder are pathologically perfectionistic in ways which are consistent with all three dimensions of perfectionism. In regard to self-oriented perfectionism, the obsessive-compulsive personality attempts to adhere to strict moral standards and has a strong achievement orientation. Any deviation from his or her standards in these domains results in feelings of loss of control and guilt for falling short of his/her standards. Obsessive-compulsives are described as being particularly vulnerable to depression under these conditions (Beck et al., 1990). Thus, it was hypothesized that obsessive-compulsive personalities would experience an increase in dysphoric mood in response to stress congruent with self-oriented perfectionism.

Other-oriented perfectionism is also characteristic of the obsessive-compulsive personality style in that these individuals hold other persons to the same strict standards of performance to which they hold themselves. It was hypothesized that the failures of others to meet the perfectionistic standards of the obsessive-compulsive personality would not engender significant increases in dysphoric mood in these individuals because no relationship between depression and other-oriented perfectionism has ever been reported in the literature.

Individuals with the obsessive-compulsive personality style perceive others as having high expectations for their performance. This aspect of the obsessive-compulsive personality style is believed to be the result of the child-rearing practices of their parents. According to some theorists, persons who later develop an obsessive-compulsive personality style learned during childhood to gain the acceptance and approval of their parents by conforming to their parents' expectations. This interpersonal mode is believed to have been generalized from the parent-child relationship to the obsessive-compulsive personality's relationships with other important persons in his/her life (Millon, 1981). In response to failures to meet the expectations of significant others, the obsessive-compulsive personality is described as feeling self-critical and experiences a lowering of self-esteem. Depression often follows such failures (Millon & Kotik, 1985). Thus, it was hypothesized that obsessive-compulsive personalities would experience increased levels of dysphoria in response to stress congruent with socially prescribed perfectionism.

The perfectionism of the narcissistic personality is somewhat different than that of the obsessive-compulsive personality. Clinical and theoretical descriptions of the narcissistic personality describe these individuals as pathologically perfectionistic in a manner consistent with two of the three dimensions of perfectionism, self-oriented and other-oriented perfectionism. Descriptions of the narcissistic personality emphasize these individuals' grandiose self-image and their tendency to overestimate their talents and abilities, as well as their preoccupation with expectations of unlimited success in

all endeavors. Narcissists are posited to have fragile self-esteem, and attempt to protect themselves from blows to self-esteem by gaining the admiration and respect of others. For the narcissist, achieving perfection in his/her performance is a means to bolster his/her fragile self-esteem. This is often because the narcissist believes that success guarantees others' respect and admiration and bolsters his/her sense of specialness and superiority. Failure to live up to these self-imposed standards of performance leads to the shame and humiliation that set the stage for depression in these individuals. Thus, it was hypothesized that persons with the narcissistic personality style would experience significantly increased levels of dysphoria in response to stress congruent with self-oriented perfectionism. In addition, it was predicted that, compared with persons with the obsessive-compulsive personality style, persons with the narcissistic personality style would respond with higher levels of dysphoria than persons with the obsessive compulsive personality style. This was expected because narcissists are more emotionally labile than are obsessive-compulsives.

Persons with the narcissistic personality style view other persons as existing to meet their needs. Narcissists feel entitled to exploit and overwork other persons without concern for others' needs. They also expect others to serve them and to defer to them. These behaviors are consistent with other-oriented perfectionism. It was not hypothesized that individuals with the narcissistic personality style would respond with significant increases in dysphoria in response to stress congruent with other-oriented perfectionism because this dimension of perfectionism has not been shown to be associated with depression.

Because of their indifference to the needs and feelings of other persons, it was not expected that narcissistic personalities would hold strong beliefs that other persons hold them to high standards of performance or that narcissists would be invested in meeting the expectations of other persons. Thus, it was not hypothesized that narcissistic personalities would become significantly dysphoric in response to stress congruent with socially prescribed perfectionism.

No specific predictions were made in regard to the responses of the mixed personality disorder style and the normal personality style control groups. This was not because perfectionistic behaviors are not theoretically present in these groups, but because no theoretical or empirical evidence supports the idea that extreme or pathological perfectionism is particularly characteristic of these personality styles. Like any other personality characteristic, perfectionism is on a continuum from healthy to pathological. Thus, it was expected that some, but not most, persons in the control groups might be extremely perfectionistic. There is no literature which would suggest that perfectionism is a typical characteristic of these groups as it is in narcissistic and obsessive-compulsive personalities.

When the main hypothesis was tested, no significant interaction between personality style and stress congruent with the dimensions of perfectionism was found. When groups were examined individually, none of the hypotheses regarding the predicted patterns of dysphoria for the two experimental groups were supported. In fact, it had been predicted that only exposure to stress congruent with self-oriented perfectionism would produce significant dysphoria in the narcissistic personality style

group. It was found, however, that only stress congruent with socially prescribed perfectionism produced significantly elevated levels of dysphoria in this group. This finding was not predicted given theoretical and clinical descriptions of narcissists which portray them as indifferent to (or oblivious of) others' expectations of them. One possible explanation for this result may be that narcissistic participants may have interpreted the socially prescribed perfectionism stressors as occasions in which others' admiration was lost, rather than as the imposition of expectations by significant others, as was intended. If this is the case, narcissistic individuals would be expected to respond to such a loss with feelings of shame, rather than indifference.

To further examine the effects of the interaction of personality with stress congruent with the different dimensions of perfectionism, the effects of stress congruent with the different dimensions of perfectionism upon mood were compared for all participants as a single group. Dysphoria in response to stressors congruent with each of the three dimensions of perfectionism was measured. Based upon the work done by Hewitt and Flett (1993), it had been predicted that participants, regardless of personality style, would respond with higher levels of dysphoria to stress congruent with self-oriented perfectionism and socially prescribed perfectionism than to stress congruent with other-oriented perfectionism. Moreover, it was predicted that socially prescribed perfectionism and self-oriented perfectionism would not differ. The results of this analysis offered mixed support for this hypothesis. As a single group, participants responded with

significantly higher levels of dysphoria to stress congruent with socially prescribed perfectionism than to stress congruent with other-oriented or self-oriented perfectionism. This finding indicates that, for this sample, the perceived failure to successfully fulfill the expectations of a significant other (stress congruent with socially prescribed perfectionism) significantly impacted upon mood, whereas failure to attain an achievement goal (stress congruent with self-oriented perfectionism) did not impact upon mood to the same degree. One possible explanation for this finding may be that perceived controllability of the stressor might of itself produce a significant decline in affect. Hewitt and Flett (1991a), in their definition of socially prescribed perfectionism, state that the standards to which persons high in socially prescribed perfectionism believe they are held by significant others are seen as externally imposed. Failure to meet these standards results in feelings of helplessness and hopelessness (Blatt, 1995). In contrast, self-imposed demands, which were portrayed in the self-oriented perfectionism stressors, are perceived as under the individual's control. Failure in this domain may not be as devastating to the individual, and thus may not be a strong or consistent precipitant of depression, even in vulnerable individuals.

Another possible explanation for the relative potency of stress congruent with socially prescribed perfectionism is that the population from which the participants were selected might be particularly sensitive to this type of stress. Neitzel and Harris (1990) in their review of the relationships among personality vulnerability, stress, and depression noted that the interaction between excessive social

dependency and interpersonal stress was a particularly robust predictor of depression, especially when subjects were college students. The authors hypothesized that the dependency by social stress interaction might be potentiated by the frequency at which negative interpersonal events are encountered by college students and/or developmental issues which are particularly relevant to college students. For most college students, especially those separated geographically from their families, peers are primary sources of acceptance and approval. Thus college students may be at more risk to become depressed in response to interpersonal stress than other age groups. This may be particularly true of women students because women in this culture are socialized throughout their lives to organize their sense of self around their ability to maintain relationships (Miller, 1986; Nolen-Hoeksema, 1987).

Overall, none of the main hypotheses were supported regarding the interaction between perfectionistic personality style and stress matched to the pattern of perfectionism theoretically expected based on descriptions of the narcissistic and obsessive-compulsive personality styles. (Only one minor hypothesis was supported: stress congruent with socially prescribed perfectionism produced increased levels of dysphoria, regardless of personality style). It is very difficult to interpret null results of this nature. In general, two explanations are possible. On one hand, it may be that the experiment was not an adequate test of the hypotheses. On the other hand, it may be that the hypotheses tested in the present study were not adequate to capture the relationship between perfectionism and depression in the personality styles of interest. These two issues are examined in the following two

sections. The adequacy of experimental design is addressed first, followed by a discussion of the hypotheses.

Strengths and Limitations

A review of the strengths and limitations of the present study will help the reader to determine whether the variables in the present study were properly defined and whether the experiment was a sound test of the stated hypotheses.

Perhaps the greatest strength of the present study was the manner in which participants in the three personality disorder style groups were selected. All participants in these groups were given the SCID-II Interview in order to validate the information obtained from the SCID-II Screen. The interview was administered to increase the probability that participants would more closely resemble the personality disorder categories they were intended to represent, given that the SCID-II Screen is known to yield a high false positive rate of personality disorder diagnoses.

Another fact taken into consideration in the decision to interview participants for the personality disorder style groups is the finding that there is considerable comorbidity found when Axis II disorders are diagnosed (Shea, 1995). Pure types are rare. The interview process made it possible to control the number of personality disorder styles present in each participant selected. To be included in the obsessive-compulsive and narcissistic personality disorder style groups, participants' SCID-II Interview proportion scores had to be greater than .33 in the category of interest. In addition, participants in these categories were

allowed up to two other personality disorder scores of .33 or greater, provided the participant's presentation of the narcissistic or obsessive-compulsive style was the most prominent. To be included in the mixed personality disorder style control group, participants were allowed up to four personality disorder proportion scores of .33 or greater.

Participants in the present study were analogues with specific personality disorder styles who were selected from a non-clinical population. The prevalence of personality disorders in general in the community is fairly low, ranging from 5.9% to 17.9% (Samuels, Nestadt, Romanoski, Folstein, & McHugh, 1994). For this reason, the inclusion criteria were necessarily liberal. Most participants in the personality disorder style groups did not meet criteria for a diagnosis of personality disorder. They did, however, exhibit personality dysfunction that ranged from mildly to moderately serious. Thus, members of the personality disorder style groups, while not as severely dysfunctional in their personality functioning as clinical subjects are, still exhibit many of the behaviors characteristic of personality disordered individuals. If it had been possible to draw the sample from a clinical population, one would expect that group differences would have been more pronounced, and that the predicted effects might have been detected. There are at least two reasons why this could be the case. First, individuals who qualify for an Axis II diagnosis are by definition seriously impaired in their personality (interpersonal and/or occupational) functioning, whereas participants in the present study were functioning at least well enough to maintain their student status.

Second, a sample drawn from a clinical population would have included many individuals older than the participants in the present study. In such individuals an Axis II diagnosis would imply that inflexible, dysfunctional behaviors were of long duration and characteristic of their typical functioning. In contrast, participants in the present study would be expected to be more flexible and less dysfunctional in virtue of their non-clinical status and the fact that, due to their youth, any dysfunctional behavior patterns they exhibit would be less crystallized than those of their clinical counterparts.

Given that the sample was selected from a non-clinical population, and that there is a fairly low prevalence rate of personality disorders in the general population, a large number of women had to be screened and interviewed to locate appropriate participants. Thus, it was not possible, even over the course of two years to find a sufficient number of participants who demonstrated personality dysfunction limited solely to the category to which they were assigned based upon the SCID-II Interview. There are benefits as well as drawbacks in using participants who are exemplars of pure types in a study of this nature. One benefit that would result from using pure types is that one could conduct a more stringent test of the hypotheses by reducing within group variability. Another benefit from using pure types is that one can better examine the hypotheses of interest as they relate to specific personality disorder categories. The primary drawback to the use of pure types is that findings from such a study would not be generalizable to the population of interest. The average number of Axis II diagnoses for any person who qualifies for one Axis II disorder has been reported to

be as high as 4.6 (Shea, 1995). Thus, the decision to include analogues who exhibited more than one personality disorder style (provided the style of interest was the most pronounced in the two experimental groups) did not seriously limit the present study.

Another strength of the present study was that it is an experimental approach to examining the interaction between personality dysfunction and stress. This approach allows causal inferences about the relationship between personality style and different types of stress related to perfectionism to be drawn in a manner which is not possible with a correlational design. For the same reason, the experimental approach has advantages over naturalistic studies of personality, stress, and depression which have been published recently (e.g., Brown et al, 1995). In the case of naturalistic studies, one lacks the degree of control over potentially confounding variables, whereas control is more likely in an experimental design.

It could be argued that because the participants in the present study did not experience the stressors personally, but viewed videotaped scenarios, that the stressors were not sufficiently relevant to elicit a strong dysphoric effect. Themes for each of the scenarios used in the present study were selected to be as meaningful as possible to the participants. The content of videotape scripts was based upon a survey taken from a sample from the same population from which the experimental participants were selected. Survey respondents were asked to rate how important it was to themselves and their significant others that they perform very well in 28 activities using a checklist developed by the investigator. In addition, the survey respondents reported activities

in which they expected others to perform extremely well. Thus, the themes selected for the scenarios reflect concerns related to perfectionistic standards endorsed by the population from which the experimental sample was selected.

A related concern regarding the videotaped scenarios is the issue of whether the scenarios actually portrayed the stressful situations they were intended to depict. To address that concern, the scenarios were rated by three groups of judges who were asked to determine the extent to which each scene portrayed stress congruent with the dimension of perfectionism it was intended to portray. The results of the videotape validation study indicated that all six scenarios illustrated successfully the stress congruent with the dimension of perfectionism they were intended to represent.

Another strength of the present study is that an initial correlational study examining the relationship between the Multidimensional Perfectionism Scale (MPS; Hewitt & Flett, 1990) and the SCID-II Screen (SCID; Spitzer et al., 1987) was conducted prior to beginning the experimental phase of the study. The correlational study established that significant positive correlations between the dimensions of perfectionism and the narcissistic and obsessive-compulsive personality disorder styles exist in the population from which the experimental participants were selected. At least one previously published study failed to show significant positive relationships between the narcissistic and obsessive-compulsive personality disorders and perfectionism (Broday, 1988). A similar investigation by Hewitt and Flett (1991a, Study 5) failed to demonstrate

a positive correlation between self-oriented perfectionism and the narcissistic and obsessive-compulsive personality disorders.

A final strength of the study is that care was taken to insure that participants in the present study were not experiencing even moderately serious symptoms of depression. Depression is a potential confound for it is hypothesized that depressed persons tend to perceive negative stimuli as more distressing than do persons who are not depressed (Alloy, Hartlage, & Abramson, 1988). Moreover, depression is hypothesized to influence the assessment of personality (Klein et al., 1993). It was decided for ethical reasons to eliminate any participants who scored 16 or greater on the Beck Depression Inventory. The videotaped scenarios depicted potentially stressful situations which could have exacerbated depressive symptoms. In the present study, the Beck Depression Inventory (BDI; Beck et al., 1961) was administered to rule out the presence of depressive symptoms just prior to beginning the experimental phase of the present study. Depression was also controlled for statistically during data analysis because the mean BDI scores of the four groups, while still in the normal range, differed. Controlling for initial levels of depression in the present study increased the likelihood that personality (learning history) played a strong role in participants' responses to the stressful stimuli that were presented.

There are some limitations of the present study which also should be addressed. One limitation of the present study, related to the SCID-II interview, which must be acknowledged is the fact that the inter-rater reliability coefficients for the study were in the moderate range. It would have been more desirable had they been stronger in magnitude.

One possible explanation for the moderate inter-rater reliability obtained in the present study is that the difference in experience using the SCID-II between the interviewer and the raters may have had an impact upon the magnitude of the reliability coefficients obtained. The interviewer had several more years of experience in administering the SCID-II Interview than did the raters, and had administered the interview to inpatients in a number of different settings, whereas the raters had not used the SCID-II interview as extensively with clinical populations. In general, the raters tended to rate individual criteria as more severe than did the interviewer.

A second potential limitation of the present study is that the external validity of laboratory studies may be limited because experimental manipulations cannot duplicate precisely the complexity of individuals' involvement in real life situations. In the case of the present study, participants did not personally experience the stressful situations to which they were exposed. They were asked to identify with the main character in the videotaped scenarios, and were asked to base their responses to the stressors upon how they would feel if they were in such situations. It is possible that this task may not have been sufficiently ego-involving for many participants. Persons are hypothesized to respond with dysphoria in response to stress relative to domains which are important to them. For example, Hewitt and colleagues discovered a relationship between depression and perfectionism when participants were engaged in an ego-involving task, but failed to find that relationship when participants were engaged in a task which was not meaningful to participants (Hewitt, Mittlestadt, & Wollert, 1989).

A possible alternative to utilizing videotaped stressors would have been to set up analogue stressful situations in which the participants were actively involved. In regard to the manipulation of stress congruent with the three dimensions of perfectionism, however, care was taken in the present study to insure that the content of the videotaped scenarios was meaningful. In a study in which it is desirable that all groups be treated exactly the same, stressors must necessarily be standardized, and using videotapes increased the probability that this would be the case. It should be noted, however, that the individual scenarios were not rated during the validity study for the magnitude of stress they evoked. It is therefore not possible to determine whether a particular theme (i.e., stress congruent with self-oriented, other-oriented, or socially prescribed perfectionism) or individual scenario was perceived as more or less stressful relative to others utilized in the study. It is recommended that future investigations using this methodology equate stimuli for magnitude of stress evoked.

Mood change in response to stressors congruent with perfectionistic standards might not be limited to depressed feelings. The Depression Adjective Checklist (DACL; Lubin, 1981) was the only dependent measure utilized in the present study. Limiting the measurement of the participants' negative affect to transient dysphoria may be insufficient to capture the differences in magnitude of persons' emotional responses to specific stressors. For instance, an investigation by Hewitt and Flett (1990) of the relationship between perfectionism and psychopathology revealed that perfectionistic individuals display higher levels of anger and anxiety than do non-

perfectionistic individuals. Some useful measures of mood states (other than depressed mood) are the Multidimensional Anger Inventory (MAI; Siegel, 1986) and the State-Trait Anxiety Inventory (STAI; Spielberger, Gorsuch, & Lushene, 1970). Because the present study was a test of the specificity hypothesis as it related to depression, measures of other negative mood states were not included.

Another potential limitation of the present study, related to the use of the DACL, is that this instrument is a measure of transient dysphoric mood and does not measure other symptoms of depression. It has not been empirically demonstrated that transient dysphoric mood, as measured by the DACL, is a predictor of syndromal depression. Possibly, there is little relationship between dysphoric mood and clinical depression. Validity studies of the DACL have, however, demonstrated that the various forms of the DACL correlate with measures of depression. Correlations between the DACL and the BDI range from .38 to .66, and correlations between the DACL and the Zung Self-Rating Depression scale range from .51 to .64 (Shaw et al., 1985). Although these correlations are only in the moderate range, it must be kept in mind that the Zung and the BDI measure cognitive and vegetative symptoms of depression in addition to depressed mood, whereas the DACL measures depressed mood only.

A limitation inherent in this (and any other) study of human behavior is the problem of measurement error. "Noise" in the form of measurement error (or error variability) is introduced at each step in the course of an investigation. The magnitude of "noise" will vary at each step in the study: participant selection, experimental

manipulation, and dependent variable measurement. For example, in the present study participants may have responded in idiosyncratic ways (based on their unique learning histories) to experimental stimuli and/or instruments employed to measure individual differences. Their responding may not have reflected solely the personality differences which were the basis of their assignment to personality style groups. Error variability is also introduced by the instruments themselves. No interview or questionnaire is perfectly reliable. Reliability coefficients less than 1.0 indicate the presence of measurement error. Thus, scores on instruments such as the DACL or the SCID-II reflect participants' true scores plus error variability.

Because it is not possible to identify all sources of measurement error (or error variability), it is usually difficult to determine with great precision the true effect size. One must rely upon previous studies to estimate the effect size, without the knowledge of how the present study compares with previously published reports in terms of the amount of "noise" present. The best recourse is to utilize the most reliable instruments available and to standardize every step in experimental procedure in order to minimize error variability. Every effort was made to take these precautions in the present study.

A final limitation of the present study is that, due to the relatively small number of participants, particularly in the narcissistic personality style group, there may have been insufficient statistical power to detect the hypothesized effects. A power analysis was conducted prior to the onset of the study. Given the effect size of 0.30, it had been determined that personality style groups should

contain approximately 20 individuals. Eighteen individuals were categorized as normal personality style. Their responses to the SCID-II Screen indicated no extensive personality pathology. It was decided not to administer the SCID-II Interview to these participants because the SCID-II Screen has a low false negative rate. A total of 43 personality disorder analogues who were willing to participate in the study were identified through the use of the SCID-II Interview over a two year period. Eighteen individuals were categorized as obsessive-compulsive personality disorder style, 15 individuals were categorized as mixed personality disorder style, and ten individuals were identified as narcissistic personality disorder style. Of the four personality style groups, the narcissistic personality disorder style group was the only one in which the number of participants did not approach the 20 per group sample size suggested by the power analysis. Although the author was aware that the prevalence of narcissistic personality disorder in the general population is approximately one percent, it was expected that a sufficient number of analogues would be identified over the duration of the study. Every effort was made by the author to locate acceptable personality disorder analogues for the study. Two hundred and six SCID-II interviews were conducted by the author over the course of three semesters, and referrals were requested from another research team who were conducting SCID-II interviews.

The above review of the strengths of the present study indicates that every precaution was taken to insure that the subject variable (personality style) and the independent variable (dimensions of perfectionism) were carefully operationalized and validated, and that

the experiment was conducted adequately. Although there are limitations to the present study, none appear to constitute sufficiently serious flaws. If this is the case, it is possible that null results were obtained because the hypotheses did not adequately capture the complexity of the relationship between personality dysfunction in the narcissistic and obsessive-compulsive personalities, life stress, and depressed mood.

Derivation of the Hypotheses

The hypotheses regarding the depressogenic effect of the interaction between perfectionism and consonant stress tested in the present study were derived from clinical and theoretical descriptions of the obsessive-compulsive and the narcissistic personality disorders. Individuals with obsessive-compulsive personality hold themselves and others to unrealistically elevated standards of performance (self-oriented and other-oriented perfectionism) and strive to conform to stringent standards which they believe others impose upon them (socially prescribed perfectionism). Individuals with the narcissistic personality have a grandiose self-image and indulge in fantasies of unlimited success and power (self-oriented perfectionism). Narcissists also believe they are entitled to make excessive demands upon others without regard for the impact their demands have upon other persons (other-oriented perfectionism). It was hypothesized that individuals with these personality styles would become significantly more depressed than members of the control groups in response to stress congruent with their personality style than in response to incongruent stress.

There are only a few empirical studies which have examined the relationship between perfectionism and the personality disorders. During the planning stage of the present study, the author conducted a correlational study which indicated that both the narcissistic and the obsessive-compulsive personality styles, as measured by the SCID-II Screen, correlated significantly with the three dimensions of perfectionism as measured by the MPS. The pattern of perfectionism in the obsessive-compulsive personality disorder was consistent with clinical and theoretical descriptions of this personality disorder. The pattern of perfectionism in the narcissistic personality disorder was somewhat inconsistent with clinical and theoretical descriptions in that the disorder correlated with all three dimensions of perfectionism, rather than only with self-oriented and other-oriented perfectionism as expected. In addition, there have been only three published studies which have addressed the relationship between perfectionism and the narcissistic and obsessive-compulsive personality disorders. In each of these studies, participants were administered personality measures which included measures of perfectionism. In one study, significant positive correlations between total score on the Narcissistic Personality Inventory (NPI; Raskin and Hall, 1979) and self-oriented perfectionism and other-oriented perfectionism were reported. Moreover, there was no significant correlation between socially prescribed perfectionism and total score on the NPI (Hewitt & Flett, 1991a, Study 3). The results of this study were consistent with clinical and theoretical descriptions of the narcissistic personality disorder. Broday (1988) administered the Millon Clinical Multiaxial Inventory (MCMI; Millon, 1983) and two

measures of perfectionism which tap primarily perfectionistic standards held for the self, the Burns Perfectionism Scale (BPS; Burns, 1980) and the Common Beliefs Survey III (Bessai, 1977). Both the narcissistic and the obsessive-compulsive personality disorders, as measured by the MCMI, correlated negatively with the two measures of perfectionism. This result is contrary to what would be expected given descriptions of these personalities as holding high standards of achievement and performance for themselves. In a similar study, Hewitt and Flett (1991a, Study 5) administered the MCMI and the MPS to 77 psychiatric patients (9.1% of whom had a primary diagnosis of personality disorder). The patterns of perfectionism expected based upon the theoretical and clinical descriptions of the narcissistic and obsessive-compulsive personality disorders were not found. The results of the studies reviewed above offer only limited support to the theoretical relationship between perfectionism and the two personality disorders focused upon in the present study. Moreover, the results of the reviewed correlational studies do not provide sufficient evidence to either abandon or accept the idea that persons with obsessive-compulsive and narcissistic personality styles are pathologically perfectionistic. Perhaps there is another factor which combines with dispositional perfectionism to render perfectionists more vulnerable to depression after encountering stress. That factor might be a history of depression. Perhaps perfectionistic individuals with a history of depression are more likely to become depressed in response to stress consistent with their perfectionistic style than would perfectionists who had never been depressed.

The theoretical descriptions of perfectionism in the narcissistic and obsessive-compulsive personalities are derived from clinical case histories and theorists' therapeutic work with personality disordered clients. Generally, persons present for therapy when suffering from an Axis I disorder, such as depression. In many cases, therapists often discover that the clinical picture also includes personality dysfunction or disorder. It is possible that many of the patients upon whom the theoretical descriptions of narcissistic and obsessive-compulsive personality are based were suffering from depression.

Extensive evidence exists that perfectionistic attitudes and behavior are more evident in depressed individuals than in non-depressed individuals. Numerous studies have demonstrated a correlation between perfectionism and depression (e.g., Flett et al., 1991; Frost et al., 1990; Hewitt & Flett, 1993). One interpretation of these results is that perfectionism predisposes persons to depression. This interpretation is based upon the vulnerability model of the relationship between personality dysfunction and depression, which is the model which formed the basis from which the hypotheses tested in the present study were derived. Of course, the results of studies which report a relationship between depression and perfectionism could be interpreted differently. Unidentified factors (e.g., poor social support) may contribute to both elevated depression and elevated perfectionism. Another possibility is that remitted depression or current depression might result in increased perfectionistic attitudes and behaviors which persist over time (Imber et al., 1990). Moreover, it is well-established that remitted or current depression is the strongest predictor of depressed symptoms.

Taken together, these notions suggest that the picture may be more complex than is captured by the hypotheses tested in the present study. Perhaps perfectionists (such as individuals with narcissistic or obsessive-compulsive personality disorder) with a past history of depression or current depressive symptoms are more likely to become significantly depressed in response to stress consistent with their perfectionistic styles than are never-depressed perfectionists. There exists some empirical support for this contention which is examined in the following section.

Tests of the Specificity Hypothesis

The hypotheses tested in the present study were derived from the specificity hypothesis, a model which posits that the interaction between certain types of personality dysfunction and stress congruent with specific personality dysfunction will result in depressive symptoms. An examination of other tests of the specificity hypothesis perhaps sheds light upon whether the two variable interaction model, from which the hypotheses tested in the present study were derived, captures adequately the relationships among personality dysfunction, stress, and depressive symptoms.

There are two widely investigated classes of personality vulnerability, conceptually related to self-oriented and socially prescribed perfectionism, which have been examined in investigations of the specificity hypothesis as it applies to the prediction of depression. The tendency to depend upon achievement to maintain one's self-esteem, demand from oneself extremely high standards of performance

and control over one's circumstances, and to become distressed in response to achievement stressors has been variously described as autonomy (Beck, 1981), self-criticism (Blatt, 1974), the dominant-goal personality (Arieti & Bemporad, 1980), and self-oriented perfectionism (Hewitt & Flett, 1991a). The tendency to depend excessively upon social contacts' approval and acceptance to maintain one's sense of well-being and to become distressed in response to interpersonal rejection has been variously described as sociotropy (Beck, 1981), dependency (Blatt, 1974), the dominant-other personality (Arieti & Bemporad, 1980), and socially prescribed perfectionism (Hewitt & Flett, 1991a).

In regard to the specificity hypothesis, it is posited that the interaction of one of these two classes of personality vulnerability and stress conceptually related to that specific vulnerability is a causal factor in the onset of depression. There have been several investigations of the specificity hypothesis in which both depressed mood was measured following the interaction of the general classes of personality vulnerability with congruent and incongruent stress. Mixed support for the specificity hypothesis was reported in four studies (Hammen, Marks, Mayol, & deMayol, 1985; Hewitt & Flett, 1993, Sample ; Robbins & Block, 1988; Zuroff & Mongrain, 1987). In two other tests of the specificity hypothesis, full support for the model was reported (Hammen, Ellicott, Gitlin, & Jamison, 1989; Hewitt & Flett, 1993, Sample 1). One study found no support for the specificity hypothesis (Smith, O'Keefe, & Jenkins, 1988). In the present study, in which only nondepressed students participated, no support was found for the specificity hypothesis. An examination of the details of these

studies reveals that full support for the specificity hypothesis was found only when participants were unipolar depressed patients, whereas no support or mixed support was found when participants were nondepressed students or patients with disorders other than unipolar depression.

The previous tests of the specificity hypothesis (including the present study), while too few in number to seriously undermine the specificity hypothesis, raise an interesting question regarding the hypothesis. Is the vulnerability by specific stress interaction, as defined by the specificity hypothesis, only evident consistently in depressed persons? In studies using nondepressed student or mixed patient samples, both matches and mismatches between the type of personality vulnerability and the class of stress encountered often predicted significantly high levels of dysphoric mood, particularly for socially dependent persons. In the two studies using unipolar depressed patients, matches between the personality vulnerability and the class of stress encountered predicted significantly higher levels of depression than did mismatches.

Perhaps the specificity model might be amended. It can be safely assumed that virtually all individuals (depressed or nondepressed) will respond to stress with some degree of negative affect. It is possible, however, that the experience of being depressed will sensitize persons to certain classes of stressors (those compatible with their particular personality vulnerability). One possible mechanism is through cognitive processes. Dysfunctional attitudes are accessible in the depressed state, but are not easily detectable when depression has remitted

(Barnett & Gotlib, 1988). It is quite possible that encountering stress consistent with the individual's particular dysfunctional attitudes intensifies these individuals' emotional responses to this particular class of stressors. This could occur to the extent that when responses to inconsistent and consistent stress are compared for depressed persons, significant differences in response magnitude are detected. In the case of nondepressed vulnerable individuals, response to both classes of stressors could be of similar magnitude, which might account for the mixed results or null results obtained in investigations of the specificity hypothesis which have used students or patients with diagnoses other than unipolar depression. Zuroff and Mongrain (1987) offered a similar explanation for their results (which showed mixed support for the specificity hypothesis). These authors hypothesized that cognitive-affective responding may occur along gradients of activation. When gradients are steeper, dysphoric responses are more likely to stress consistent with the content of the cognitive-affective structure, whereas when gradients are more flat, dysphoric responses are likely to stress both consistent and inconsistent with the content of the cognitive-affective structure. Because these gradients of activation are presumed to be influenced by differences in affective states (as well as other variables), it is likely that the slope of the gradient may be significantly influenced by current depression. If this is the case, one would expect depressed individuals to respond with a greater magnitude of dysphoria to stress congruent with the content of their cognitive-affective structures than to incongruent stress. One would also expect nondepressed individuals to respond to both types of stress

with some level of dysphoria, but the levels of dysphoric responding would be similar to both types of stress.

The null findings of the present study do not rule out the possibility that perfectionistic personality characteristics and stress congruent with perfectionism interact to produce depression in individuals with narcissistic or obsessive-compulsive personality styles. The findings do allow one to raise the question of whether this two-variable interaction is a sufficient cause for depressed mood in these personalities. It may be that a more complex interaction (which would include other variables, such as a previous history of depression) might better predict the onset of depressed mood in perfectionistic individuals. Possibly, previous depression might make pathologically perfectionistic attitudes more salient and/or strengthen perfectionistic behaviors. Perhaps then when previously depressed perfectionists encounter stress congruent with these attitudes and behaviors, they are more likely to become depressed than are perfectionists who have never been depressed.

If this is the case, it may be a partial explanation for the null results obtained in the present study for two reasons. First, none of the study participants was depressed. Second, the interaction between perfectionism and stress was the only factor examined in the present study. Further research would help to clarify the nature of the specific depressogenic effects of the interaction between personality vulnerability and consonant life stress. For example, the role of the interaction between perfectionism and congruent stress as a precipitating or maintaining factor in depression could be tested

experimentally using a design similar to that employed in the present study by including a history of depression versus no history of depression as a factor.

Directions for Future Research

Beyond the question of whether the specificity hypothesis could be amended, there are a number of other issues that can be addressed regarding the nature of future attempts to study the relationship between personality dysfunction as characterized by excessive perfectionism, congruent stress, and depression. First, as mentioned above, the role of previous depressive symptoms upon the perfectionistic characteristics of obsessive-compulsive or narcissistic persons should be examined in future studies which address the emotional responses to stress congruent with perfectionism in individuals with these personality disorders. Future studies might also examine the relationships among depression, stress, and perfectionism in persons clinically diagnosed with narcissistic or obsessive-compulsive personality disorders, rather than in analogue personality disordered individuals. It is likely that clinically disordered individuals differ qualitatively from analogues in a manner which would permit the investigator to draw more precise conclusions regarding the psychological impact of the interaction between perfectionism and stress. For instance, persons clinically diagnosed with narcissistic or obsessive-compulsive personality disorders may differ from analogues in terms of their learning histories and coping strategies in ways which could exacerbate the effects of stressors to which they are vulnerable.

Another issue which was alluded to earlier in this paper is the question of how broadly the emotional effects of stress should be measured. It is recommended that future investigations of this nature measure a broader spectrum of negative affect in response to stress congruent with perfectionism in individuals with narcissistic or obsessive-compulsive personality disorders. Measurement of anger and anxiety, for instance, could also be considered in order to examine more fully how individuals with different personality disorders or personality disorder styles respond differentially to stress. Although depressed mood is the primary emotional component of syndromal depression, other emotions are often part of the symptom profile.

Naturalistic and longitudinal studies are another approach to studying the relationships among depression, stress, and perfectionism in narcissistic or obsessive-compulsive individuals. Naturalistic studies would enable the researcher to examine the depressogenic effects of specific stressors upon study participants. Longitudinal studies in which relevant variables are assessed at many points in time could yield information regarding the direction of the relationships among the variables. Such designs would allow an examination of the complex relationships among stressful events, past and current depression, and other variables such as coping strategies, social support, and effort expended in the pursuit of perfectionistic goals.

Finally, future studies should be designed to maximize generalizability of the results. The conclusions about the emotional impact of the interaction between personality and stress congruent with perfectionism drawn from the present study may not be applicable to a

wide range of individuals with narcissistic or obsessive-compulsive personality disorders because participants were primarily white, all college women, and all under the age of 30. Future studies might include both sexes because the incidence of narcissistic and obsessive-compulsive personality disorders is approximately equal in both sexes. Future studies might also include different age groups and a wider range educational and/or SES levels in order to improve the generalizability of the results.

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APPENDIX A

TABLES

Table 1

Correlations between the subscales of the Multidimensional Perfectionism Scale (MPS) and the self-report version of the Structured Clinical Interview for the DSM-III (SCID) (n = 368)

	<u>MPS Perfectionism Subscales</u>		
	Self-Oriented	Other-Oriented	Socially Prescribed
<u>SCID</u> <u>Personality</u> <u>Disorder Scales</u>			
Avoidant	.149*	.093	.287*
Dependent	-.011	.003	.276*
Obsessive-Compulsive	.348*	.148*	.262*
Passive-Aggressive	.018	.094	.291*
Paranoid	.170*	.144*	.320*
Schizotypal	.117	.057	.237*
Schizoid	.079	.043	.153*
Histrionic	.111	.109	.197*
Narcissistic	.148*	.177*	.275*
Borderline	.032	.024	.375*
Antisocial	-.135	.057	.193*

* $p < .01$

APPENDIX A - continued

Table 2

Participant Information

Demographic Information

	Narcissistic N = 10	Obsessive-compulsive N = 18	Mixed Personality N = 15	Normal N = 18
<u>Age</u>				
Mean	18.3	18.4	17.9	18.9
S.D.	.48	.70	.70	1.26
Range	18-19	18-20	17-21	18-27
<u>Race</u>				
White	8	15	11	16
Black	2	3	4	2

Covariates

<u>BDI</u>				
Mean	4.40	3.78	4.40	2.67
S.D.	3.24	2.82	3.56	3.31
Range	1-10	1-12	0-11	0-10
<u>IRI</u>				
Mean	70.2	73.0	69.9	69.2
S.D.	10.8	7.2	10.2	7.8
Range	57-90	59-88	58-91	50-84

APPENDIX A - continued

Table 3

SCID Interview Proportion Scores ($p > .330$) for Each Personality Disorder for which the Participant Was Interviewed

Group 1 (Narcissistic Personality Style)

Subject No.	Personality Disorder Proportion Scores	
101	HS .437	NR .500
102	NR .389	
103	AV .357	NR .500
104	PR .428	NR .500
105	HS .375	NR .445
106	NR .500	
107	PR .428	NR .445
108	PA .500	NR .500
109	NR .445	
110	ST .389	NR .445

Group 2 (Obsessive-Compulsive Personality Style)

Subject No.	Personality Disorder Proportion Scores	
004	AV .357	OC .378
025	AV .428	OC .722
052	OC .667	
137	OC .445	BD .375
140	OC .389	
141	OC .389	
057	OC .389	
058	OC .389	
059	OC .500	
060	OC .445	
061	OC .611	
063	OC .389	
064	OC .389	
065	OC .389	
066	OC .500	
067	OC .500	
068	OC .500	
069	OC .389	

Group 3 (Mixed Personality Disorder Style Control Group)

Subject No.	Personality Disorder Proportion Scores	
050	HS .667	NR .389
051	PR .500	
136	HS .375	
053	AV .570	PR .640

APPENDIX A - continued

Table 3 continued

SCID Interview Proportion Scores (p > .330) for Each Personality Disorder for which the Participant Was Interviewed

Group 3 (Mixed Personality Disorder Style Control Group) - continued

Subject No.	Personality Disorder Proportion Scores			
147	AV .357	DP .500	OC .333	PA .610
081	DP .556			
082	DP .445	PR .571	NR .334	
083	PA .389			
085	AV .570	DP .334		
086	AV .500			
087	AV .357	PR .357		
088	HS .375			
089	AV .357			
090	PA .389	PR .500		
091	PR .428			

Note. Abbreviations of the 11 Personality Disorders: AV Avoidant, DP Dependent, OC Obsessive-Compulsive, PA Passive-Aggressive, PR Paranoid, ST Schizotypal, SZ Schizoid, HS Histrionic, NR Narcissistic, BD Borderline, AN Antisocial

APPENDIX A - continued

Table 4

Inter-rater reliability coefficients. Calculations are based upon agreement between raters for each diagnostic criterion assessed.

 Descriptive Statistics

N = 22, Mean = .5216, Standard Deviation = .19, Range = .2644 - .8974

Ratings of Individual Interviews

Rater #1

Number	Kappa Coefficient
766	.3334
472	.8974
628	.2943
794	.3109
476	.6282
770	.3043
644	.2644
464	.5333
622	.5291
603	.3077

Rater #2

621	.4896
685	.6466
679	.3204
691	.7274
473	.8926
701	.5953
366	.5627

Rater #3

659	.7161
387	.5211
475	.4585
678	.4465
507	.6954

APPENDIX A - continued

Table 5

Videotape Validation

Group 1: Freshman and Sophomore Women (N = 19)

Group 2: Junior and Senior Women (N = 18)

Group 3: Graduate Students (N = 5)

Self-Oriented Perfectionism Videotape One

Self-Oriented Perfectionism	Group 1	Group 2	Group 3
Not Represented	0%	0%	0%
Neutral	5%	5%	0%
Greatly Represented	95%	95%	100%
Socially Prescribed Perfectionism	Group 1	Group 2	Group 3
Not Represented	58%	84%	100%
Neutral	21%	16%	0%
Greatly Represented	20%	0%	0%
Other-Oriented Perfectionism	Group 1	Group 2	Group 3
Not Represented	37%	72%	80%
Neutral	26%	0%	0%
Greatly Represented	37%	28%	20%

Self-Oriented Perfectionism Videotape Two

Self-Oriented Perfectionism	Group 1	Group 2	Group 3
Not Represented	5%	0%	0%
Neutral	0%	0%	0%
Greatly Represented	100%	100%	100%

APPENDIX A - continued

Table 5 - continued

Self-Oriented Perfectionism Videotape Two - continued

Socially Prescribed Perfectionism	Group 1	Group 2	Group 3
Not Represented	100%	95%	100%
Neutral	0%	5%	0%
Greatly Represented	5%	0%	0%
Other-Oriented Perfectionism	Group 1	Group 2	Group 3
Not Represented	89%	100%	60%
Neutral	5%	0%	20%
Greatly Represented	10%	0%	20%

Other-Oriented Perfectionism Videotape One

Self-Oriented Perfectionism	Group 1	Group 2	Group 3
Not Represented	68%	95%	80%
Neutral	26%	0%	0%
Greatly Represented	5%	5%	20%
Socially Prescribed Perfectionism	Group 1	Group 2	Group 3
Not Represented	37%	50%	40%
Neutral	31%	34%	40%
Greatly Represented	31%	16%	20%
Other-Oriented Perfectionism	Group 1	Group 2	Group 3
Not Represented	10%	5%	0%
Neutral	0%	5%	0%
Greatly Represented	89%	89%	100%

APPENDIX A - continued

Table 5 -continued

Other-Oriented Perfectionism Videotape Two

Self-Oriented Perfectionism	Group 1	Group 2	Group 3
Not Represented	95%	100%	60%
Neutral	5%	0%	0%
Greatly Represented	0%	0%	40%
Socially Prescribed Perfectionism	Group 1	Group 2	Group 3
Not Represented	100%	100%	80%
Neutral	0%	0%	20%
Greatly Represented	0%	0%	0%
Other-Oriented Perfectionism	Group 1	Group 2	Group 3
Not Represented	0%	0%	0%
Neutral	0%	0%	0%
Greatly Represented	100%	100%	100%

Socially Prescribed Perfectionism Videotape One

Self-Oriented Perfectionism	Group 1	Group 2	Group 3
Not Represented	21%	28%	60%
Neutral	47%	28%	20%
Greatly Represented	31%	44%	20%
Socially Prescribed Perfectionism	Group 1	Group 2	Group 3
Not Represented	5%	0%	0%
Neutral	0%	0%	0%
Greatly Represented	95%	100%	100%

APPENDIX A - continued

Table 5 -continued

Socially Prescribed Perfectionism Videotape One - continued

Other-Oriented Perfectionism	Group 1	Group 2	Group 3
Not Represented	68%	61%	80%
Neutral	16%	28%	0%
Greatly Represented	16%	11%	20%

Socially Prescribed Perfectionism Videotape Two

Self-Oriented Perfectionism	Group 1	Group 2	Group 3
Not Represented	53%	55%	80%
Neutral	21%	17%	0%
Greatly Represented	26%	28%	20%

Socially Prescribed Perfectionism	Group 1	Group 2	Group 3
Not Represented	5%	0%	0%
Neutral	0%	11%	0%
Greatly Represented	95%	89%	100%

Other-Oriented Perfectionism	Group 1	Group 2	Group 3
Not Represented	74%	78%	100%
Neutral	10%	0%	0%
Greatly Represented	16%	23%	0%

APPENDIX A - continued

Table 6

An Overview of the Hypotheses Tested and the Findings1. Videotape EffectsPrediction

There would be no significant difference between the two scenes which represented each two of the three dimensions socially- of perfectionism.

Results

- a. There were no significant differences between the two scenes representing other-oriented perfectionism or the scenes representing prescribed perfectionism.
- b. There was a significant difference between the two scenes representing self-oriented perfectionism.

2. Correlations between DACL Change Scores for All Six Videotaped ScenesPrediction

The two scenes representing the same dimension of perfectionism will correlate more strongly than two scenes which represent two different dimensions of perfectionism.

Results

The two scenes which represented a single dimension of perfectionism correlated more strongly than did any two scenes which represented two different dimensions of perfectionism.
(All correlations were positive).

3. Interaction between Personality and Perfectionism-Congruent StressPredictions

- a. The narcissistic and obsessive-compulsive style groups will experience greater dysphoria than the control groups in response to stress congruent with self-oriented perfectionism.
- b. The obsessive-compulsive group will show greater dysphoria than the narcissistic group or the two control groups in response to stress congruent with socially prescribed perfectionism.
- c. No differences in dysphoria among the groups is expected in response to stress congruent with other-oriented perfectionism.

Results

No significant interaction was detected.

APPENDIX A - continued

Table 6 - continued

An Overview of the Hypotheses Tested and the Findings - Continued4. Main Effect of PerfectionismPredictions

- a. Stress congruent with self-oriented and socially prescribed perfectionism will induce greater dysphoria than stress congruent with other-oriented perfectionism.
- b. Stress congruent with self-oriented and socially prescribed perfectionism will induce a similar magnitude of dysphoria.

Results

- a. Stress congruent with self-oriented and other-oriented perfectionism induced similar levels of dysphoria.
- b. Stress congruent with socially prescribed perfectionism induced greater dysphoria than stress congruent with self-oriented and other-oriented perfectionism.

5. Within Group Differences in Response to Stress Congruent with Each Dimension of Perfectionism (by Group).Group 1: NarcissisticPredictions

- a. Stress congruent with self-oriented perfectionism will induce higher levels of dysphoria than stress congruent with other-oriented or socially prescribed perfectionism.
- b. Stress congruent with other-oriented and socially prescribed perfectionism will induce similar levels of dysphoria.

Results

- a. Stress congruent with socially prescribed perfectionism induced higher levels of dysphoria than stress congruent with self-oriented perfectionism.
- b. Stress congruent with other-oriented perfectionism induced levels of dysphoria similar to stress congruent with socially prescribed and self-oriented perfectionism.

Group 2: Obsessive-CompulsivePrediction

Stress congruent with self-oriented and socially prescribed perfectionism will induce higher levels of dysphoria than stress congruent with other-oriented perfectionism.

Results

There were no differences in the levels of dysphoria induced by stress congruent with each of the three dimensions of perfectionism.

APPENDIX A - continued

Table 6 - continued

An Overview of the Hypotheses Tested and the Findings - Continued5. Within Group Differences in Response to Stress Congruent with Each Dimension of Perfectionism (by Group). - ContinuedGroup 3: Mixed Personality Disorder Style Control GroupPrediction

No specific predictions were made for this control group.

Results

There were no differences in the levels of dysphoria induced by stress congruent with each of the three dimensions of perfectionism.

Group 4. Normal Control GroupPrediction

No specific predictions were made for this control group.

Results

There were no differences in the levels of dysphoria induced by stress congruent with each of the three dimensions of perfectionism.

6. Contrasts between Pairs of Personality Styles for Each Perfectionism DimensionSelf-Oriented PerfectionismPredictions

a. The narcissistic group will respond with higher levels of dysphoria to stress congruent with self-oriented perfectionism than will the obsessive-compulsive, mixed, and normal personality style groups.

b. The obsessive-compulsive group will respond with higher levels of dysphoria to stress congruent with self-oriented perfectionism than will the mixed and normal personality style control groups, which will respond with similar levels of dysphoria.

Results

a. The narcissistic group did not respond with higher levels of dysphoria to stress congruent with self-oriented perfectionism than did the obsessive-compulsive, mixed, and normal personality style groups.

b. The obsessive-compulsive group responded with lower levels of dysphoria to stress congruent with self-oriented perfectionism than the mixed personality style group.

c. The obsessive-compulsive group and the normal personality style responded with similar levels of dysphoria to stress congruent with self-oriented perfectionism.

APPENDIX A - continued

Table 6 - continued

An Overview of the Hypotheses Tested and the Findings - Continued6. Contrasts between Pairs of Personality Styles for Each Perfectionism Dimension - ContinuedSelf-Oriented PerfectionismResults

d. The normal and mixed personality style groups responded with similar levels of dysphoria to stress congruent with self-oriented perfectionism.

Other-oriented PerfectionismPrediction

All four personality style groups will respond with similar levels of dysphoria to stress congruent with other-oriented perfectionism.

Results

All four groups responded with similar levels of dysphoria to stress congruent with other-oriented perfectionism.

Socially Prescribed PerfectionismPredictions

a. The obsessive-compulsive group will respond with greater dysphoria than the narcissistic, mixed, and normal personality style groups to stress congruent with socially prescribed perfectionism.

b. The narcissistic, mixed, and normal groups will respond with similar levels of dysphoria to stress congruent with socially prescribed perfectionism.

Results

a. The obsessive-compulsive group did not respond with higher levels of dysphoria than did the narcissistic, mixed, and normal groups to stress congruent with socially prescribed perfectionism.

b. The narcissistic, mixed, and normal groups responded with similar levels of dysphoria to stress congruent with socially prescribed perfectionism.

APPENDIX A - continued

Table 7

Tests of Significance for Covariates (Level of Empathy and Level of Depression) for Each AnalysisPreliminary Analysis: Videotape EffectsSelf-Oriented Perfectionism Videotape 1

Source	Num DF	Den DF	Type III SS	F	Pr > F
Empathy	1	55	227.62	7.27	.0093
Depression	1	55	284.77	9.09	.0039

Self-Oriented Perfectionism Videotape 2

Source	Num DF	Den DF	Type III SS	F	Pr > F
Empathy	1	55	399.54	12.26	.0009
Depression	1	55	104.75	3.21	.0785

Other-Oriented Perfectionism Videotape 1

Source	Num DF	Den DF	Type III SS	F	Pr > F
Empathy	1	55	0.09	0.00	.9570
Depression	1	55	86.76	2.81	.0994

Other-Oriented Perfectionism Videotape 2

Source	Num DF	Den DF	Type III SS	F	Pr > F
Empathy	1	55	5.03	0.15	.6963
Depression	1	55	96.80	2.96	.0908

Socially Prescribed Perfectionism Videotape 1

Source	Num DF	Den DF	Type III SS	F	Pr > F
Empathy	1	55	83.77	2.28	.1366
Depression	1	55	75.76	2.06	.1565

Socially Prescribed Perfectionism Videotape 2

Source	Num DF	Den DF	Type III SS	F	Pr > F
Empathy	1	55	69.80	1.70	.1974
Depression	1	55	30.61	0.75	.3914

Interaction between Dimension of Perfectionism and Personality StyleSelf-Oriented Perfectionism

Source	Num DF	Den DF	Type III SS	F	Pr > F
Empathy	1	55	307.57	10.67	.0019
Depression	1	55	183.74	6.37	.0145

APPENDIX A - continued

Table 7 - continued

Other-Oriented Perfectionism

<u>Source</u>	<u>Num</u> <u>DF</u>	<u>Den</u> <u>DF</u>	<u>Type</u> <u>III</u> <u>SS</u>	<u>F</u>	<u>Pr</u> <u>></u> <u>F</u>
Empathy	1	55	0.94	0.04	.8506
Depression	1	55	91.71	3.49	.0672

Socially Prescribed Perfectionism

<u>Source</u>	<u>Num</u> <u>DF</u>	<u>Den</u> <u>DF</u>	<u>Type</u> <u>III</u> <u>SS</u>	<u>F</u>	<u>Pr</u> <u>></u> <u>F</u>
Empathy	1	55	76.63	2.26	.1381
Depression	1	55	50.67	1.50	.2263

Effect of Dimension of PerfectionismSelf-Oriented Perfectionism

<u>Source</u>	<u>Num</u> <u>DF</u>	<u>Den</u> <u>DF</u>	<u>Type</u> <u>III</u> <u>SS</u>	<u>F</u>	<u>Pr</u> <u>></u> <u>F</u>
Empathy	1	55	307.57	10.67	.0019
Depression	1	55	183.74	6.37	.0145

Other-Oriented Perfectionism

<u>Source</u>	<u>Num</u> <u>DF</u>	<u>Den</u> <u>DF</u>	<u>Type</u> <u>III</u> <u>SS</u>	<u>F</u>	<u>Pr</u> <u>></u> <u>F</u>
Empathy	1	55	0.94	0.04	.8506
Depression	1	55	91.71	3.49	.0672

Socially Prescribed Perfectionism

<u>Source</u>	<u>Num</u> <u>DF</u>	<u>Den</u> <u>DF</u>	<u>Type</u> <u>III</u> <u>SS</u>	<u>F</u>	<u>Pr</u> <u>></u> <u>F</u>
Empathy	1	55	76.63	2.26	.1381
Depression	1	55	50.67	1.50	.2263

Within Group Differences in Perfectionism for Each GroupNarcissistic Personality StyleSelf-Oriented Perfectionism

<u>Source</u>	<u>Num</u> <u>DF</u>	<u>Den</u> <u>DF</u>	<u>Type</u> <u>III</u> <u>SS</u>	<u>F</u>	<u>Pr</u> <u>></u> <u>F</u>
Empathy	1	7	293.61	21.78	.0023
Depression	1	7	87.66	6.50	.0381

APPENDIX A - continued

Table 7 - continued

Within Group Differences in Perfectionism for Each Group - ContinuedNarcissistic Personality Style - ContinuedOther-Oriented Perfectionism

<u>Source</u>	<u>Num</u>	<u>DF</u>	<u>Den</u>	<u>DF</u>	<u>Type III</u>	<u>SS</u>	<u>F</u>	<u>Pr > F</u>
Empathy	1		7		26.63		0.91	.3723
Depression	1		7		44.09		1.50	.2597

Socially Prescribed Perfectionism

<u>Source</u>	<u>Num</u>	<u>DF</u>	<u>Den</u>	<u>DF</u>	<u>Type III</u>	<u>SS</u>	<u>F</u>	<u>Pr > F</u>
Empathy	1		7		283.93		40.71	.0004
Depression	1		7		100.83		14.46	.0067

Obsessive-Compulsive Personality Style GroupSelf-Oriented Perfectionism

<u>Source</u>	<u>Num</u>	<u>DF</u>	<u>Den</u>	<u>DF</u>	<u>Type III</u>	<u>SS</u>	<u>F</u>	<u>Pr > F</u>
Empathy	1		15		1.32		0.05	.8203
Depression	1		15		0.08		0.00	.9551

Other-Oriented Perfectionism

<u>Source</u>	<u>Num</u>	<u>DF</u>	<u>Den</u>	<u>DF</u>	<u>Type III</u>	<u>SS</u>	<u>F</u>	<u>Pr > F</u>
Empathy	1		15		0.90		0.03	.8647
Depression	1		15		6.23		0.21	.6555

Socially Prescribed Perfectionism

<u>Source</u>	<u>Num</u>	<u>DF</u>	<u>Den</u>	<u>DF</u>	<u>Type III</u>	<u>SS</u>	<u>F</u>	<u>Pr > F</u>
Empathy	1		15		84.87		2.91	.1087
Depression	1		15		40.26		1.38	.2584

Mixed Personality Disorder Style Control GroupSelf-Oriented Perfectionism

<u>Source</u>	<u>Num</u>	<u>DF</u>	<u>Den</u>	<u>DF</u>	<u>Type III</u>	<u>SS</u>	<u>F</u>	<u>Pr > F</u>
Empathy	1		12		98.58		3.09	.1042
Depression	1		12		200.80		6.30	.0274

APPENDIX A - continued

Table 7 - continued

Within Group Differences in Perfectionism for Each Group - ContinuedOther-Oriented Perfectionism

<u>Source</u>	<u>Num DF</u>	<u>Den DF</u>	<u>Type III SS</u>	<u>F</u>	<u>Pr > F</u>
Empathy	1	12	1.37	0.09	.7672
Depression	1	12	94.05	6.30	.0274

Socially Prescribed Perfectionism

<u>Source</u>	<u>Num DF</u>	<u>Den DF</u>	<u>Type III SS</u>	<u>F</u>	<u>Pr > F</u>
Empathy	1	12	0.11	0.00	.9577
Depression	1	12	42.12	1.14	.3070

Normal Control GroupSelf-Oriented Perfectionism

<u>Source</u>	<u>Num DF</u>	<u>Den DF</u>	<u>Type III SS</u>	<u>F</u>	<u>Pr > F</u>
Empathy	1	15	1.15	0.04	.8445
Depression	1	15	3.37	0.12	.7377

Other-Oriented Perfectionism

<u>Source</u>	<u>Num DF</u>	<u>Den DF</u>	<u>Type III SS</u>	<u>F</u>	<u>Pr > F</u>
Empathy	1	15	37.11	1.12	.3070
Depression	1	15	0.64	0.02	.8912

Socially Prescribed Perfectionism

<u>Source</u>	<u>Num DF</u>	<u>Den DF</u>	<u>Type III SS</u>	<u>F</u>	<u>Pr > F</u>
Empathy	1	15	54.73	1.47	.2440
Depression	1	15	0.80	0.02	.8856

Contrasts between Pairs of Personality Styles For Each Dimension of PerfectionismSelf-Oriented Perfectionism

<u>Source</u>	<u>Num DF</u>	<u>Den DF</u>	<u>Type III SS</u>	<u>F</u>	<u>Pr > F</u>
Empathy	1	55	307.57	10.67	.0019
Depression	1	55	183.74	6.37	.0145

Other-Oriented Perfectionism

<u>Source</u>	<u>Num DF</u>	<u>Den DF</u>	<u>Type III SS</u>	<u>F</u>	<u>Pr > F</u>
Empathy	1	55	0.94	0.04	.8506
Depression	1	55	91.71	3.49	.0672

APPENDIX A - continued

Table 7 - continued

Contrasts between Pairs of Personality Styles For Each Dimension of Perfectionism - continued

<u>Source</u>	<u>Num DF</u>	<u>Den DF</u>	<u>Type III SS</u>	<u>F</u>	<u>Pr > F</u>
Empathy	1	55	76.63	2.26	.1381
Depression	1	55	50.67	1.50	.2263

APPENDIX A - continued

Table 8

Multivariate ANCOVA for Videotape EffectsOverall Test of Significance

<u>Statistic</u>	<u>Value</u>	<u>F</u>	<u>Num DF</u>	<u>Den DF</u>	<u>Pr > F</u>
Wilks' Lambda	0.7520	5.8	3	53	.0016

First Contrast: Self-Oriented Perfectionism Videotape 1 vs Videotape 2

<u>Source</u>	<u>DF</u>	<u>SS</u>	<u>F</u>	<u>p</u>
Intercept	1	204.93	16.41	.0002
Error	55	686.73		

Second Contrast: Other-Oriented Perfectionism Videotape 1 vs Videotape 2

<u>Source</u>	<u>DF</u>	<u>SS</u>	<u>F</u>	<u>p</u>
Intercept	1	8.70	0.40	.5312
Error	55	1204.49		

Third Contrast: Socially Prescribed Perfectionism Videotape 1 vs Videotape 2

<u>Source</u>	<u>DF</u>	<u>SS</u>	<u>F</u>	<u>p</u>
Intercept	1	21.38	1.06	.3067
Error	55	1104.87		

APPENDIX A - continued

Table 9

Correlations Among the Six Videotapes Depicting Stress Congruent with the Three Dimensions of Perfectionism

	Self1	Self2	Other1	Other2	Social1	Social2
Self1	1.00	0.83	0.36	0.30	0.43	0.36
Self2			0.35	0.33	0.39	0.30
Other1				0.66	0.34	0.31
Other2					0.35	0.36
Social1						0.75
Social2						1.00

Note. All correlations are significant at $p < .05$.

APPENDIX A - continued

Table 10

Multivariate ANCOVA for Interaction between Dimension of Perfectionism and Personality StyleOverall Test of Significance

<u>Statistic</u>	<u>Value</u>	<u>F</u>	<u>Num DF</u>	<u>Den DF</u>	<u>Pr > F</u>
Wilks' Lambda	0.8904	1.07	6	108	.3818

First Contrast: Self-Oriented Perfectionism vs. Other-Oriented Perfectionism

<u>Source</u>	<u>DF</u>	<u>SS</u>	<u>F</u>	<u>p</u>
Group	3	100.61	0.96	.4199
Error	55	1928.66		

Second Contrast: Self-Oriented Perfectionism vs. Socially Prescribed Perfectionism

<u>Source</u>	<u>DF</u>	<u>SS</u>	<u>F</u>	<u>p</u>
Group	3	234.43	2.04	.1186
Error	55	2104.91		

Third Contrast: Other-Oriented Perfectionism vs. Socially Prescribed Perfectionism

<u>Source</u>	<u>DF</u>	<u>SS</u>	<u>F</u>	<u>p</u>
Group	3	44.98	0.40	.7505
Error	55	2040.01		

APPENDIX A - continued

Table 11

Table of Least Squares Means

<u>Personality Style</u>	<u>Dimension of Perfectionism</u>			
	Self-Oriented	Other-Oriented	Socially Prescribed	
Narcissistic	8.72	10.94	14.12	11.26
Compulsive	7.65	9.99	11.51	9.72
Mixed	11.71	11.02	11.48	11.40
Normal	10.48	10.63	12.33	11.15
	9.64	10.65	12.36	

APPENDIX A - continued

Table 12

Multivariate ANCOVA for Effects of PerfectionismOverall Test of Significance

<u>Statistic</u>	<u>Value</u>	<u>F</u>	<u>Num DF</u>	<u>Den DF</u>	<u>Pr > F</u>
Wilks' Lambda	0.8294	5.55	2	54	.0064

First Contrast: Self-Oriented Perfectionism vs. Other-Oriented Perfectionism

<u>Source</u>	<u>DF</u>	<u>SS</u>	<u>F</u>	<u>p</u>
Intercept	1	58.64	1.67	.2014
Error	55	1928.66		

Second Contrast: Self-Oriented Perfectionism vs. Socially Prescribed Perfectionism

<u>Source</u>	<u>DF</u>	<u>SS</u>	<u>F</u>	<u>p</u>
Intercept	1	426.32	11.14	.0015
Error	55	2104.91		

Third Contrast: Other-Oriented Perfectionism vs. Socially Prescribed Perfectionism

<u>Source</u>	<u>DF</u>	<u>SS</u>	<u>F</u>	<u>p</u>
Intercept	1	168.73	4.55	.0374
Error	55	2040.01		

APPENDIX A - continued

Table 13

Table of Least Squares Means Estimated from Centered Covariates

<u>Personality Style</u>	<u>Dimension of Perfectionism</u>			
	Self-Oriented	Other-Oriented	Socially Prescribed	
Narcissistic	9.36	11.35	15.07	11.93
Compulsive	8.15	10.10	11.01	9.75
Mixed	12.09	11.29	11.53	11.64
Normal	10.47	10.80	12.16	11.14
	9.64	10.65	12.36	

APPENDIX A - continued

Table 14

Multivariate Ancova for Within Group Differences in Response to Dimensions of Perfectionism By GroupNarcissistic Personality Style GroupOverall Test of Significance

<u>Statistic</u>	<u>Value</u>	<u>F</u>	<u>Num DF</u>	<u>Den DF</u>	<u>Pr > F</u>
Wilks' Lambda	0.2920	7.27	2	6	.0249

First Contrast: Self-Oriented Perfectionisms vs. Other-Oriented Perfectionism

<u>Source</u>	<u>DF</u>	<u>SS</u>	<u>F</u>	<u>P</u>
Intercept	1	35.71	1.79	.2230
Error	7	139.82		

Second Contrast: Self-Oriented Perfectionism vs. Socially Prescribed Perfectionism

<u>Source</u>	<u>DF</u>	<u>SS</u>	<u>F</u>	<u>P</u>
Intercept	1	294.27	12.77	.0090
Error	7	161.25		

Third Contrast: Other-Oriented Perfectionism vs. Socially Prescribed Perfectionism

<u>Source</u>	<u>DF</u>	<u>SS</u>	<u>F</u>	<u>P</u>
Intercept	1	124.97	2.44	.1619
Error	7	357.84		

Obsessive-Compulsive Personality Style GroupOverall Test of Significance

<u>Statistic</u>	<u>Value</u>	<u>F</u>	<u>Num DF</u>	<u>Den DF</u>	<u>Pr > F</u>
Wilks' Lambda	0.8209	1.53	2	14	.2513

First Contrast: Self-Oriented Perfectionisms vs. Other-Oriented Perfectionism

<u>Source</u>	<u>DF</u>	<u>SS</u>	<u>F</u>	<u>p</u>
Intercept	1	60.48	1.59	.2265
Error	15	570.28		

APPENDIX A - continued

Table 14 - continued

Multivariate Ancova for Within Group Differences in Response to Dimensions of Perfectionism By Group - ContinuedSecond Contrast: Self-Oriented Perfectionism vs. Socially Prescribed Perfectionism

<u>Source</u>	<u>DF</u>	<u>SS</u>	<u>F</u>	<u>p</u>
Intercept	1	129.84	3.08	.0996
Error	15	631.92		

Third Contrast: Other-Oriented Perfectionism vs. Socially Prescribed Perfectionism

<u>Source</u>	<u>DF</u>	<u>SS</u>	<u>F</u>	<u>p</u>
Intercept	1	13.09	0.33	.5747
Error	15	596.66		

Mixed Personality Disorder Style Control GroupOverall Test of Significance

<u>Statistic</u>	<u>Value</u>	<u>F</u>	<u>Num DF</u>	<u>Den DF</u>	<u>Pr > F</u>
Wilks' Lambda	0.9856	0.08	2	11	.9234

First Contrast: Self-Oriented Perfectionisms vs. Other-Oriented Perfectionism

<u>Source</u>	<u>DF</u>	<u>SS</u>	<u>F</u>	<u>p</u>
Intercept	1	9.20	0.17	.6870
Error	12	647.37		

Second Contrast: Self-Oriented Perfectionism vs. Socially Prescribed Perfectionism

<u>Source</u>	<u>DF</u>	<u>SS</u>	<u>F</u>	<u>p</u>
Intercept	1	4.49	0.07	.7889
Error	12	719.55		

Third Contrast: Other-Oriented Perfectionism vs. Socially Prescribed Perfectionism

<u>Source</u>	<u>DF</u>	<u>SS</u>	<u>F</u>	<u>p</u>
Intercept	1	0.83	0.03	.8622
Error	12	317.81		

APPENDIX A - continued

Table 14 - continued

Multivariate Ancova for Within Group Differences in Response to Dimensions of Perfectionism By Group - ContinuedNormal Personality Control GroupOverall Test of Significance

<u>Statistic</u>	<u>Value</u>	<u>F</u>	<u>Num DF</u>	<u>Den DF</u>	<u>Pr > F</u>
Wilks' Lambda	0.8848	0.91	2	14	.4245

First Contrast: Self-Oriented Perfectionisms vs. Other-Oriented Perfectionism

<u>Source</u>	<u>DF</u>	<u>SS</u>	<u>F</u>	<u>p</u>
Intercept	1	1.756	0.05	.8205
Error	15	493.64		

Second Contrast: Self-Oriented Perfectionism vs. Socially Prescribed Perfectionism

<u>Source</u>	<u>DF</u>	<u>SS</u>	<u>F</u>	<u>p</u>
Intercept	1	46.14	1.88	.1900
Error	15	367.19		

Third Contrast: Other-Oriented Perfectionism vs. Socially Prescribed Perfectionism

<u>Source</u>	<u>DF</u>	<u>SS</u>	<u>F</u>	<u>p</u>
Intercept	1	29.90	0.79	.3872
Error	15	565.33		

APPENDIX A - continued

Table 15

Contrasts between Pairs of Participant Personality Styles for Each of the Three Dimensions of PerfectionismOverall Test of Significance

<u>Statistic</u>	<u>Value</u>	<u>F</u>	<u>Num DF</u>	<u>Den DF</u>	<u>Pr > F</u>
Wilks' Lambda	0.8626	0.90	9	129	.5285

Self-Oriented Perfectionism

<u>Contrast</u>	<u>Num DF</u>	<u>Den DF</u>	<u>F</u>	<u>Pr > F</u>
NAR vs OC	1	55	0.25	.6182
NAR vs MX	1	55	1.86	.1783
NAR vs NORM	1	55	0.67	.4173
OC vs MX	1	55	4.55	.0375
OC vs NORM	1	55	2.40	.1269
MX vs NORM	1	55	0.41	.5234

Other-Oriented Perfectionism

<u>Contrast</u>	<u>Num DF</u>	<u>Den DF</u>	<u>F</u>	<u>Pr > F</u>
NAR vs OC	1	55	0.21	.6463
NAR vs MX	1	55	0.00	.9665
NAR vs NORM	1	55	0.02	.8833
OC vs MX	1	55	0.32	.5733
OC vs NORM	1	55	0.13	.7154
MX vs NORM	1	55	0.05	.8314

Socially Prescribed Perfectionism

<u>Contrast</u>	<u>Num DF</u>	<u>Den DF</u>	<u>F</u>	<u>Pr > F</u>
NAR vs OC	1	55	1.27	.2642
NAR vs MX	1	55	1.23	.2714
NAR vs NORM	1	55	0.59	.4473
OC vs MX	1	55	0.00	.9904
OC vs NORM	1	55	0.18	.6768
MX vs NORM	1	55	0.17	.6823

APPENDIX B

Multidimensional Perfectionism Scale

Directions: Listed below are a number of statements concerning personal characteristics and traits. Read each item and decide whether you agree or disagree and to what extent.

If you strongly agree, choose 5; if you strongly disagree, choose 1. If you feel somewhere in between circle any one of the numbers between 1 and 5. If you feel neutral or undecided, the midpoint is 3.

1. When I am working on something, I cannot relax until it is perfect.
Disagree Agree
1--2--3--4--5
2. I am not likely to criticize someone for giving up too easily.
Disagree Agree
1--2--3--4--5
3. It is not important that the people that I am close to are successful.
Disagree Agree
1--2--3--4--5
4. I seldom criticize my friends for accepting second best.
Disagree Agree
1--2--3--4--5
5. I find it difficult to meet others' expectations of me.
Disagree Agree
1--2--3--4--5
6. One of my goals is to be perfect in everything I do.
Disagree Agree
1--2--3--4--5
7. Everything that others do must be of top-notch quality.
Disagree Agree
1--2--3--4--5
8. I never aim for perfection in my work.
Disagree Agree
1--2--3--4--5
9. Those around me readily accept that I can make mistakes too.
Disagree Agree
1--2--3--4--5
10. It doesn't matter when someone close to me doesn't do their absolute best.
Disagree Agree
1--2--3--4--5
11. The better I do, the better I am expected to do.
Disagree Agree
1--2--3--4--5
12. I seldom feel the need to be perfect.
Disagree Agree
1--2--3--4--5
13. Anything I do that is less than excellent will be seen as poor work by those around me.
Disagree Agree
1--2--3--4--5

APPENDIX B - continued

Multidimensional Perfectionism Scale - continued

- | | | |
|--|---------------|-------|
| 14. I strive to be as perfect as I can be. | Disagree | Agree |
| | 1--2--3--4--5 | |
| 15. It is very important that I am perfect in everything that I attempt. | Disagree | Agree |
| | 1--2--3--4--5 | |
| 16. I have high expectations for the people who are important to me. | Disagree | Agree |
| | 1--2--3--4--5 | |
| 17. I strive to be the best at everything I do. | Disagree | Agree |
| | 1--2--3--4--5 | |
| 18. The people around me expect me to succeed at everything I do. | Disagree | Agree |
| | 1--2--3--4--5 | |
| 19. I have very high standards for those around me. | Disagree | Agree |
| | 1--2--3--4--5 | |
| 20. I demand nothing less than perfection of myself. | Disagree | Agree |
| | 1--2--3--4--5 | |
| 21. Others will like me even if I don't excel at everything. | Disagree | Agree |
| | 1--2--3--4--5 | |
| 22. I can't be bothered with people who won't strive to better themselves. | Disagree | Agree |
| | 1--2--3--4--5 | |
| 23. It makes me uneasy to see an error in my work. | Disagree | Agree |
| | 1--2--3--4--5 | |
| 24. I do not expect a lot from my friends. | Disagree | Agree |
| | 1--2--3--4--5 | |
| 25. Success means that I must work even harder to please others. | Disagree | Agree |
| | 1--2--3--4--5 | |
| 26. If I ask someone to do something, I expect it to be done flawlessly. | Disagree | Agree |
| | 1--2--3--4--5 | |
| 27. I cannot stand to see people close to me make mistakes. | Disagree | Agree |
| | 1--2--3--4--5 | |
| 28. I am perfectionistic in setting my goals. | Disagree | Agree |
| | 1--2--3--4--5 | |
| 29. The people who matter to me should never let me down. | Disagree | Agree |
| | 1--2--3--4--5 | |
| 30. Others think I'm okay, even when I don't succeed. | Disagree | Agree |
| | 1--2--3--4--5 | |
| 31. I feel that people are too demanding of me. | Disagree | Agree |
| | 1--2--3--4--5 | |

APPENDIX B - continued

Multidimensional Perfectionism Scale - continued

32. I must work to my full potential at all times. Disagree Agree
1--2--3--4--5
33. Although they may not show it, other people get very upset with me when I slip up. Disagree Agree
1--2--3--4--5
34. I do not have to be the best at whatever I am doing. Disagree Agree
1--2--3--4--5
35. My family expects me to be perfect. Disagree Agree
1--2--3--4--5
36. I do not have very high goals for myself. Disagree Agree
1--2--3--4--5
37. My parents rarely expect me to excel in all aspects of my life. Disagree Agree
1--2--3--4--5
38. I respect people who are average. Disagree Agree
1--2--3--4--5
39. People expect nothing less than perfection from me. Disagree Agree
1--2--3--4--5
40. I set very high standards for myself. Disagree Agree
1--2--3--4--5
41. People expect more from me than I am capable of giving. Disagree Agree
1--2--3--4--5
42. I must always be successful at school or work. Disagree Agree
1--2--3--4--5
43. It does not matter to me when a close friend does not try their hardest. Disagree Agree
1--2--3--4--5
44. People around me think I am still competent even if I make a mistake. Disagree Agree
1--2--3--4--5
45. I seldom expect others to excel at whatever they do. Disagree Agree
1--2--3--4--5

APPENDIX C

SCID Screen

Directions: These questions are about the kind of person you generally are. That is, how you usually have felt or behaved over the past several years. Circle "Yes" or "No."

1. Are your feelings more easily hurt than most people's if someone criticizes you or disapproves of something you say or do? NO YES
2. Are there very few people that you are really close to outside your immediate family? NO YES
3. Do you avoid getting involved with people unless you are certain they will like you? NO YES
4. Do you avoid social situations in which you might have to talk with other people? NO YES
5. Have you avoided jobs or assignments that involved having to deal with a lot of people? NO YES
6. Are you often quiet in social situations because you're afraid of saying the wrong thing? NO YES
7. Have you often been afraid that you might look nervous or tense, or might cry or blush in front of other people? NO YES
8. Do a lot of things seem dangerous or difficult to you that do not seem that way to most people? NO YES
9. Do you need a lot of advice or reassurance from others before you can make everyday decisions? NO YES
10. Have you allowed other people to make very important decisions for you? NO YES
11. Do you often agree with other people even when you think they are wrong? NO YES
12. Do you find it hard to start or work on tasks when there is no one to help you? NO YES
13. Have you often done unpleasant or demeaning things to get other people to like you? NO YES
14. Do you generally prefer not to be by yourself? NO YES
15. Do you often do things to avoid being alone? NO YES

APPENDIX C - continued

SCID Screen - continued

16. Have you ever felt helpless or devastated when a close relationship ended? NO YES
17. Do you worry a lot about people you care about leaving you? NO YES
18. Do you have trouble finishing jobs because you spend so much time trying to get things exactly right? NO YES
19. Are you the kind of person who focuses on details, order, and organization, or who likes to make lists and schedules? NO YES
20. Do you sometimes insist that other people do things exactly the way you want? NO YES
21. Do you sometimes do things yourself because you know that no one else will do them exactly right? NO YES
22. Are you, or does your family feel that you are, so devoted to work (or school) that you have no time left for other people or for just having fun? NO YES
23. Do you sometimes have trouble making decisions because you can't make up your mind about what to do or how to do it? NO YES
24. Do you have higher standards than most people about what is right and what is wrong? NO YES
25. Do you often get angry at other people for breaking rules? NO YES
26. Have other people complained that you are not affectionate enough? NO YES
27. Do you rarely give presents, volunteer time, or do favors for other people? NO YES
28. Do you have trouble throwing things out because they might come in handy someday? NO YES
29. Do you often put off doing things that people ask you to do until the last minute? NO YES
30. Are you the kind of person who gets irritable or sulky if someone asks you to do something you don't want to do? NO YES
31. Are you the kind of person who works very slowly or who does a bad job when asked to do something that you really don't want to do? NO YES

APPENDIX C - continued

SCID Screen - continued

32. Do people often make unreasonable demands on you? NO YES
33. Do you tend to "forget" to do things you are supposed to do if you really don't want to do them? NO YES
34. Do you often think you are doing a better job than others give you credit for? NO YES
35. Does it annoy you when people make suggestions about how you could get more work done? NO YES
36. Have people complained that you were holding them up by not doing your share of a job? NO YES
37. Do you often find that the people who are in charge of things (such as your boss or teachers) do not deserve your respect? NO YES
38. Have you chosen a friend or lover who has taken advantage of you or let you down? NO YES
39. Have you sometimes gotten into bad situations at work or at school where you wound up being taken advantage of? NO YES
40. Do you often refuse help from other people because you don't want to bother them? NO YES
41. When people try to help you, do you make it hard for them? NO YES
42. When you are successful, do you feel depressed or like you don't deserve it, or do you do something to spoil the success? NO YES
43. Do you often say or do things that make other people upset or angry with you? NO YES
44. Do you often turn down the chance to do things that you really enjoy ? NO YES
45. Do you sometimes not admit to others that you had a good time? NO YES
46. Have you not accomplished many of the personal goals that you have set for yourself? NO YES
47. Are you not interested in, or even bored with, people who are nice to you? NO YES
48. Do you almost always do what is good for other people rather than what is good for you? NO YES

APPENDIX C - continued

SCID Screen - continued

49. Do you do things for other people even when they don't want you to or try to discourage you? NO YES
50. Do you often have to keep an eye out to stop people from using you or hurting you? NO YES
51. Are you sometimes not sure whether you can trust your friends or the people you work with? NO YES
52. Do you often pick up hidden meanings in what people say or do? NO YES
53. Are you the kind of person who holds grudges or takes a long time to forgive people who have insulted you or slighted you? NO YES
54. Do you find it best not to let other people know too much about you? NO YES
55. Do you often get angry because someone has slighted you or insulted you? NO YES
56. Have you suspected that your spouse or partner has been unfaithful? NO YES
57. When you see people talking, do you often wonder if they are talking about you? NO YES
58. Have you often felt that the way things were arranged had a special significance for you? NO YES
59. Do you often feel nervous in a group of more than two or three people you don't know? NO YES
60. Have you ever felt that you could make things happen just by making a wish or thinking about them? NO YES
61. Have you had experiences with the supernatural, astrology, seeing the future, UFO's, ESP, or a personal experience with a sixth sense? NO YES
62. Do you often mistake objects or shadows for people or noises for voices? NO YES
63. Have you had the sense that some person or force is around you, even though you cannot see anyone? NO YES

APPENDIX C - continued

SCID Screen - continued

64. Have you had the experience of looking at a person or yourself in a mirror and seeing the face change right before your eyes? NO YES
65. Do you not need close relationships with other people, like family or friends? NO YES
66. Would you rather do things alone than with other people? NO YES
67. Do you never seem to have really strong feelings, like being very angry or very happy? NO YES
68. Could you be content without being sexually involved with another person? NO YES
69. Do you not care much about what people think of you? NO YES
70. Do you often go out of your way to get people to praise you? NO YES
71. Do you flirt a lot? NO YES
72. Do you often dress in a sexy way even when you are going to work or doing errands? NO YES
73. Does it bother you more than most people if you don't look attractive? NO YES
74. Are you often very open with your emotions, for example, hugging people when you greet them or crying easily? NO YES
75. Do you like to be the center of attention? NO YES
76. Are you the kind of person who can't wait to get what you want if you really want it? NO YES
77. When you're criticized, do you often feel very angry, ashamed, or put down, even hours or days later? NO YES
78. Have you sometimes had to use other people to get what you wanted? NO YES
79. Do you sometimes "sweet talk" people just to get what you want out of them? NO YES
80. Do you feel you are a person with special talents or abilities? NO YES
81. Have people told you that you have too high an opinion of yourself? NO YES

APPENDIX C - continued

SCID Screen - continued

82. When you have a problem, do you almost always insist on seeing the top person? NO YES
83. Do you often daydream about achieving great things or being famous? NO YES
84. Do you often daydream about having a "perfect" romance? NO YES
85. Do you think that it's not necessary to follow certain rules or social conventions when they get in your way? NO YES
86. Is it important to you that people pay attention to you or admire you in some way? NO YES
87. Have people said that you are not sympathetic or understanding about their problems? NO YES
88. Are you often envious of other people? NO YES
89. Do your relationships with the people you really care about have lots of ups and downs? NO YES
90. Have you often done things impulsively? NO YES
91. Are you a "moody" person? NO YES
92. Do you often have temper outbursts or get so angry that you lose control? NO YES
93. Do you hit people or throw things when you get angry? NO YES
94. Do even little things get you very angry? NO YES
95. Have you tried to hurt or kill yourself or threatened to do so? NO YES
96. Are you different with different people or in different situations so that you sometimes don't know who you really are? NO YES
97. Are you often confused about your long-term goals or career plans? NO YES
98. Do you often change your mind about the types of friends or lovers you want? NO YES
99. Are you often not sure about what your real values are? NO YES

APPENDIX C - continued

SCID Screen - continued

100. Do you often feel bored or empty inside? NO YES

101. Have you often become frantic when you thought that someone you really cared about was going to leave you? NO YES

THE FOLLOWING QUESTIONS ARE ABOUT THINGS YOU MAY HAVE DONE BEFORE YOU WERE FIFTEEN.

102. Did you often skip school? NO YES

103. Did you ever run away from home and stay out overnight? NO YES

104. Did you start fights? NO YES

105. Did you ever use a weapon in a fight? NO YES

106. Did you ever force someone to have sex with you? NO YES

107. Did you ever hurt an animal on purpose? NO YES

108. Did you ever hurt another person on purpose (other than in a fight)? NO YES

109. Did you deliberately damage things that were not yours? NO YES

110. Did you set fires? NO YES

111. Did you lie a lot? NO YES

112. Did you ever steal things? NO YES

113. Did you ever rob or mug someone? NO YES

Appendix D

SCID Interview Consent Form

I agree to participate in this study being conducted by Patricia Cassady under the direction of Dr. Rosemary Nelson-Gray. I understand that I will be asked to respond to an interview designed to determine my personality type. In return for my participation in this study, I will receive one research participation credit per hour of participation. I further understand that many of the persons who have completed this interview may be invited to participate in related studies in return for additional research participation credit or other compensation.

I have been informed of the procedures to be followed in this study, and I realize that the risks and/or the discomforts that may result from my participation in this study are minimal. I realize that all information will be held in confidence, and that my name will not be associated in any way with the data collected in this study. Moreover, I realize that the results of this study may be published in the form of group data, and that no individual participants will be identified by name. I recognize that all data collected during the course of this study will be stored for five years in a locked laboratory, and those data will not contain information which could identify individual participants. At the end of the five year period, all data will be destroyed.

I recognize that I am free to terminate my participation in this study at any time without penalty or prejudice. The experimenter will answer any questions I may have regarding this study. I realize that I may obtain further information about the conduct and review of human research at this institution by telephoning the Office of Sponsored Programs at 334-5878.

Please ask any questions you may have. After your questions have been answered, please sign below if you agree to participate in this study.

Please Print Your Name Here

Please Sign Your Name Here

Witness

Date

APPENDIX D - continued

SCID Interview Consent Form

I agree to participate in this study being conducted by Patricia Cassady under the direction of Dr. Rosemary Nelson-Gray. I understand that I will be asked to respond to an interview designed to determine my personality type. In return for my participation in this study, I will receive ten dollars. I further understand that some of the persons who have completed this interview may be invited to participate in related studies in return for additional compensation.

I have been informed of the procedures to be followed in this study, and I realize that the risks and/or the discomforts that may result from my participation in this study are minimal. I realize that all information will be held in confidence, and that my name will not be associated in any way with the data collected in this study. Moreover, I realize that the results of this study may be published in the form of group data, and that no individual participants will be identified by name. I recognize that all data collected during the course of this study will be stored for five years in a locked laboratory, and those data will not contain information which could identify individual participants. At the end of the five year period, all data will be destroyed.

I recognize that I am free to terminate my participation in this study at any time without penalty or prejudice. The experimenter will answer any questions I may have regarding this study. I realize that I may obtain further information about the conduct and review of human research at this institution by telephoning the Office of Sponsored Programs at 334-5878.

Please ask any questions you may have. After your questions have been answered, please sign below if you agree to participate in this study.

Please Print Your Name Here

Please Sign Your Name Here

Witness

Date

Appendix E

SCID Interview Debriefing Statement

Thank you for your participation in this study. The purpose of this study was to identify persons, based upon their responses to the interview conducted today, who might be good candidates for participation in some other studies being conducted by Dr. Nelson-Gray's research group.

You were selected on the basis of your responses to a questionnaire administered during mass testing at the beginning of this semester. The questionnaire and interview are used to determine the individual's personality style.

It is not possible to discuss your personality style or your responses to the study with you at the present time. If you are interested in learning more about your personality, you may wish to consult with any of the agencies listed below.

UNC-G Student Counseling Center
12 Gove Building
UNC-G Campus
334-5874

UNC-G Psychology Clinic
377 Eberhart Building
UNC-G Campus
334-5662

Guilford County Mental Health Clinic
201 N. Eugene Street
Greensboro, N. C.
373-3630

APPENDIX F

Beck Inventory

On this questionnaire are groups of statements. Please read each group of statements carefully. Then pick out the one statement in each group which best describes the way you have been feeling the PAST TWO WEEKS, INCLUDING TODAY. Circle the number beside the statement you picked. If several statements in the group seem to apply equally well, circle each one. Be sure to read all the statements in each group before your choice.

1. 0 I do not feel sad.
1 I feel sad.
2 I am sad all the time and I can't snap out of it.
3 I am so sad or unhappy that I can't stand it
2. 0 I am not particularly discouraged about the future.
1 I feel discouraged about the future.
2 I feel I have nothing to look forward to.
3 I feel that the future is hopeless and that things cannot improve.
3. 0 I do not feel like a failure.
1 I feel that I have failed more than the average person.
2 As I look back on my life, all I can see is a lot of failures.
3 I feel I am a complete failure as a person
4. 0 I get as much satisfaction out of things as I used to.
1 I don't enjoy things the way I used to.
2 I don't get real satisfaction out of anything anymore.
3 I am dissatisfied or bored with everything.
5. 0 I don't feel particularly guilty.
1 I feel guilty a good part of the time.
2 I feel quite guilty most of the time.
3 I feel guilty all of the time.
6. 0 I don't feel I am being punished.
1 I feel I may be punished.
2 I expect to be punished.
3 I feel I am being punished.
7. 0 I don't feel disappointed in myself.
1 I am disappointed in myself.
2 I am disgusted with myself.
3 I hate myself.
8. 0 I don't feel I am any worse than anybody else.
1 I am critical of myself for my weaknesses or mistakes.
2 I blame myself all the time for my faults.
3 I blame myself for everything bad that happens.

APPENDIX F - continued

Beck Inventory - continued

9. 0 I don't have any thoughts of killing myself.
1 I have thoughts of killing myself, but I would not carry them out.
2 I would like to kill myself.
3 I would kill myself if I had the chance.
10. 0 I don't cry any more than usual.
1 I cry more now than I used to.
2 I cry all the time now.
3 I used to be able to cry, but now I can't cry even though I want to.
11. 0 I am no more irritated now than I ever am.
1 I get annoyed or irritated more easily than I used to.
2 I feel irritated all the time now.
3 I don't get irritated at all by the things that used to irritate me.
12. 0 I have not lost interest in other people.
1 I am less interested in other people than I used to be.
2 I have lost most of my interest in other people.
3 I have lost all my interest in other people.
13. 0 I make decisions about as well as I ever could.
1 I put off making decisions more than I used to.
2 I have greater difficulty in making decisions than before.
3 I can't make decisions at all anymore.
14. 0 I don't feel I look any worse than I used to.
1 I am worried that I am looking old or unattractive.
2 I feel that there are permanent changes in my appearance that make me look unattractive.
3 I believe that I look ugly.
15. 0 I can work about as well as before.
1 It takes an extra effort to get started at doing something.
2 I have to push myself very hard to do anything.
3 I can't do any work at all.
16. 0 I can sleep as well as usual.
1 I don't sleep as well as I used to.
2 I wake up 1-2 hours earlier than usual and find it hard to get back to sleep.
3 I wake up several hours earlier than I used to and cannot get back to sleep.

APPENDIX F - continued

Beck Inventory - continued

17. 0 I don't get more tired than usual.
1 I get tired more easily than I used to.
2 I I get tired from doing almost anything.
3 I am too tired to do anything.
18. 0 My appetite is no worse than usual.
1 My appetite is not as good as it used to be.
2 My appetite is much worse now.
3 I have no appetite at all anymore.
19. 0 I haven't lost much weight, if any, lately.
1 I have lost more than 5 pounds.
2 I have lost more than 10 pounds.
3 I have lost more than 15 pounds.
- I am purposely trying to lose weight by eating less.
___ Yes ___ No
20. 0 I am no more worried about my health than usual.
1 I am worried about my physical problems such as aches and pains;
or upset stomach; or constipation.
2 I am very worried about physical problems and it's hard to think
of much else.
3 I am so worried about my physical problems that I cannot think of
anything else.
21. 0 I have not noticed any recent change in my interest in sex.
1 I am less interested in sex than I used to be.
2 I am much less interested in sex now.
3 I have lost interest in sex completely.

APPENDIX G - contined

Interpersonal Reactivity Index - continued

10. I sometimes try to understand my friends better by imagining how things look from their perspective.
 does not describe me well describes me very well
 1 2 3 4 5
11. I believe that there are two sides to every question and try to look at them both.
 does not describe me well describes me very well
 1 2 3 4 5
12. I sometimes find it difficult to see things from the "other guy's" point of view.
 does not describe me well describes me very well
 1 2 3 4 5
13. I try to look at everybody's side of a disagreement before I make a decision.
 does not describe me well describes me very well
 1 2 3 4 5
14. When I'm upset with someone, I usually try to "put myself in his shoes" for a while.
 does not describe me well describes me very well
 1 2 3 4 5
15. When I see someone being taken advantage of, I feel kind of protective towards them.
 does not describe me well describes me very well
 1 2 3 4 5
16. When I see someone being treated unfairly, i sometimes don't feel very much pity for them.
 does not describe me well describes me very well
 1 2 3 4 5
17. I often have tender, concerned feelings for people less fortunate than me.
 does not describe me well describes me very well
 1 2 3 4 5
18. I would describe myself a a pretty soft-hearted person.
 does not describe me well describes me very well
 1 2 3 4 5

APPENDIX G - continued

Interpersonal Reactivity Index - continued

19. Sometimes I don't feel very sorry for other people when they are having problems.
 does not describe me well describes me very well
 1 2 3 4 5
20. Other people's misfortunes do not usually disturb me a great deal.
 does not describe me well describes me very well
 1 2 3 4 5
21. I am often quite touched by things that I see happen.
 does not describe me well describes me very well
 1 2 3 4 5
22. When I see someone who badly needs help in an emergency, I go to pieces.
 does not describe me well describes me very well
 1 2 3 4 5
23. I sometimes feel help[less when I am in the middle of a very emotional situation.
 does not describe me well describes me very well
 1 2 3 4 5
24. In emergency situations, I feel helpless and ill-at ease.
 does not describe me well describes me very well
 1 2 3 4 5
25. I am usually pretty effective in dealing with emergencies.
 does not describe me well describes me very well
 1 2 3 4 5
26. Being in a tense emotional situation scares me.
 does not describe me well describes me very well
 1 2 3 4 5
27. When I see someone hurt, I tend to remain calm.
 does not describe me well describes me very well
 1 2 3 4 5
28. I tend to lose control during emergencies.
 does not describe me well describes me very well
 1 2 3 4 5

APPENDIX H

Depression Adjective Checklists

DIRECTIONS: Below you will find words which describe moods and feelings. Check the words that describe How You Feel Now. Some of the words may sound alike, but check all of the words that describe your feelings.

- | | |
|---|--|
| <input type="checkbox"/> Wilted | <input type="checkbox"/> Strong |
| <input type="checkbox"/> Safe | <input type="checkbox"/> Tortured |
| <input type="checkbox"/> Miserable | <input type="checkbox"/> Listless |
| <input type="checkbox"/> Gloomy | <input type="checkbox"/> Sunny |
| <input type="checkbox"/> Dull | <input type="checkbox"/> Destroyed |
| <input type="checkbox"/> Gay | <input type="checkbox"/> Wretched |
| <input type="checkbox"/> Low-spirited | <input type="checkbox"/> Broken |
| <input type="checkbox"/> Sad | <input type="checkbox"/> Light-hearted |
| <input type="checkbox"/> Unwanted | <input type="checkbox"/> Criticized |
| <input type="checkbox"/> Fine | <input type="checkbox"/> Grieved |
| <input type="checkbox"/> Broken-hearted | <input type="checkbox"/> Dreamy |
| <input type="checkbox"/> Downcast | <input type="checkbox"/> Hopeless |
| <input type="checkbox"/> Enthusiastic | <input type="checkbox"/> Oppressed |
| <input type="checkbox"/> Failure | <input type="checkbox"/> Joyous |
| <input type="checkbox"/> Afflicted | <input type="checkbox"/> Weary |
| <input type="checkbox"/> Active | <input type="checkbox"/> Droopy |

APPENDIX H - continued

Forms Two through Seven of the Depression Adjective Checklist

Form Two: Downhearted, Lively, Unfeeling, Alone, Unhappy, Alive, Terrible, Poor, Forlorn, Alert, Exhausted, Heartsick, Bright, Glum, Desolate, Composed, Clean, Dispirited, Moody, Pleased, Dead, Sorrowful, Bleak, Light, Morbid, Heavy-hearted, Easy-going, Gray, Melancholy, Hopeful, Mashed, Unlucky

Form Three: Cheerless, Animated, Blue, Lost, Dejected, Healthy, Discouraged, Bad, Despondent, Free, Despairing, Uneasy, Peaceful, Grim, Distressed, Whole, Bouyant, Tormented, Weak, Optimistic, Low, Deserted, Burdened, Wonderful, Crushed, Somber, Interested, Joyless, Crestfallen, Lucky, Chained, Pessimistic

Form Four: Depressed, Elated, Awful, Lifeless, Griefstricken, Inspired, Woeful, Lonely, Suffering, Mellow, Drooping, Rejected, Fortunate, Dreary, Lousy, Good, Fit, Lonesome, Unloved, Glad, Grave, Sunk, Shot, Merry, Wasted, Washed Out, Clear, Gruesome, Tired, High, Worse, Drained

Form Five: Unhappy, Active, Blue, Downcast, Dispirited, Composed, Distressed, Cheerless, Lonely, Free, Lost, Broken, Good, Burdened, Forlorn, Vigorous, Peaceful, Well, Apathetic, Chained, Strong, Dejected, Awful, Glum, Great, Finished, Hopeless, Lucky, Tortured, Listless, Safe, Wilted, Criticized, Fit

Form Six: Sorrowful, Lively, Uneasy, Tormented, Low-spirited, Clean, Discouraged, Suffering, Broken-hearted, Easy-going, Downhearted, Washed Out, Playful, Joyless, Despairing, Gay, Friendly, Successful, Rejected, Crestfallen, Jolly, Deserted, Grieved, Low, Steady, Wretched, Terrible, Inspired, Woeful, Unworthy, Joyous, Destroyed, Somber, Unconcerned

Form Seven: Heartsick, Healthy, Sad, Afflicted, Lonesome, Fine, Alone, Gloomy, Depressed, Alive, Heavy-hearted, Failure, Glad, Despondent, Sunk, Optimistic, Jovial, Enthusiastic, Bleak, Griefstricken, Eager, Drained, Desolate, Miserable, Merry, Dull, Melancholy, Interested, Unwanted, Gruesome, Whole, Oppressed Lifeless, Elated

APPENDIX I

Activities Questionnaire

INSTRUCTIONS:

Below are a number of statements about many different kinds of activities. For each statement indicate how important it is to you to each of these activities very well by circling a number from 1 to 5.

Circle 1 if it is not at all important for you to do the activity very well. Circle 5 if it is extremely important for you to do the activity very well. If you are neutral or undecided about an item, circle 3.

	not important	extremely important
1. Doing well in a math class (e.g., calculus)	1--2--3--4--5	
2. Keeping your room, apartment or house clean	1--2--3--4--5	
3. Giving a talk in public (e.g., a speech)	1--2--3--4--5	
4. Cooking and baking	1--2--3--4--5	
5. Driving a car	1--2--3--4--5	
6. Getting dates with attractive persons	1--2--3--4--5	
7. Looking your best (weight and figure)	1--2--3--4--5	
8. Doing well in athletics	1--2--3--4--5	
9. Being hired for a job for which you applied	1--2--3--4--5	
10. Being accepted at a particular school	1--2--3--4--5	
11. Doing well in a social science class	1--2--3--4--5	
12. Looking attractive (makeup and hair	1--2--3--4--5	
13. Receiving approval from your parents	1--2--3--4--5	
14. Being accepted into a social organization (e.g., club or sorority)	1--2--3--4--5	
15. Wearing attractive, stylish clothes	1--2--3--4--5	
16. Getting academic recognition	1--2--3--4--5	
17. Doing well in a humanities class	1--2--3--4--5	
18. Being held in high esteem by your peers	1--2--3--4--5	

APPENDIX I - continued
Activities Questionnaire

- | | |
|---|---------------|
| 19. Writing creatively (e.g., poetry, song lyrics) | 1--2--3--4--5 |
| 20. Learning an aerobics routine | 1--2--3--4--5 |
| 21. Staying on a particular diet | 1--2--3--4--5 |
| 22. Doing well in a science class | 1--2--3--4--5 |
| 23. Writing technical papers (e.g., lab reports) | 1--2--3--4--5 |
| 24. Getting your professors' approval | 1--2--3--4--5 |
| 25. Being elected to an office (e.g., student government) | 1--2--3--4--5 |
| 26. Doing volunteer work | 1--2--3--4--5 |
| 27. Doing crafts or artwork | 1--2--3--4--5 |
| 28. Gardening | 1--2--3--4--5 |

For the next set of activities, indicate how important it is to **other people** (e.g., your friends, parents, romantic partner) that you do the activity very well. In other words, do you believe that others have high standards for your performance of these activities?

- | | not
important | extremely
important |
|--|------------------|------------------------|
| 1. Doing well in a math class (e.g., calculus) | 1--2--3--4--5 | |
| 2. Keeping your room, apartment or house clean | 1--2--3--4--5 | |
| 3. Giving a talk in public (e.g., a speech) | 1--2--3--4--5 | |
| 4. Cooking and baking | 1--2--3--4--5 | |
| 5. Driving a car | 1--2--3--4--5 | |
| 6. Getting dates with attractive persons | 1--2--3--4--5 | |
| 7. Looking your best (weight and figure) | 1--2--3--4--5 | |
| 8. Doing well in athletics | 1--2--3--4--5 | |

APPENDIX I - continued

Activities Questionnaire

- | | |
|--|---------------|
| 9. Being hired for a job for which you applied | 1--2--3--4--5 |
| 10. Being accepted at a particular school | 1--2--3--4--5 |
| 11. Doing well in a social science class | 1--2--3--4--5 |
| 12. Looking attractive (makeup and hair | 1--2--3--4--5 |
| 13. Receiving approval from your parents | 1--2--3--4--5 |
| 14. Being accepted into a social organization (e.g., club or sorority) | 1--2--3--4--5 |
| 15. Wearing attractive, stylish clothes | 1--2--3--4--5 |
| 16. Getting academic recognition | 1--2--3--4--5 |
| 17. Doing well in a humanities class | 1--2--3--4--5 |
| 18. Being held in high esteem by your peers | 1--2--3--4--5 |
| 19. Writing creatively (e.g., poetry, song lyrics) | 1--2--3--4--5 |
| 20. Learning an aerobics routine | 1--2--3--4--5 |
| 21. Staying on a particular diet | 1--2--3--4--5 |
| 22. Doing well in a science class | 1--2--3--4--5 |
| 23. Writing technical papers (e.g., lab reports) | 1--2--3--4--5 |
| 24. Getting your professors' approval | 1--2--3--4--5 |
| 25. Being elected to an office (e.g., student government) | 1--2--3--4--5 |
| 26. Doing volunteer work | 1--2--3--4--5 |
| 27. Doing crafts or artwork | 1--2--3--4--5 |
| 28. Gardening | 1--2--3--4--5 |

Is it important to you that other people do certain things well? Yes No
 Please list the kinds of things for which it is important to you that
 other people do well.

Appendix I - continued

Activities Questionnaire

Is it important to you that other people do certain things well? Yes No
Please list the kinds of things for which it is important to you that
other people do well.

In the first set of questions you were asked to indicate how important
it was to you that you do well in many different kinds of activities.
Are there any other activities, not previously listed, for which it is
important to you that you do very well?

Appendix I - continued

In the second set of questions you were asked to indicate how important you believe it is to other people that you do well in many different kinds of activities. Are there any other activities, not previously listed, for which it is important to other people that you do very well?

Activities Questionnaire Mean Ratings for Each Category

Mean Ratings of Domains of Functioning Rated by Participants as Important That They Perform Well

1. Doing well in a math class (e.g., calculus)	3.6
2. Keeping your room, apartment or house clean	3.4
3. Giving a talk in public (e.g., a speech)	2.1
4. Cooking and baking	1.6
5. Driving a car	3.8
6. Getting dates with attractive persons	2.1
7. Looking your best (weight and figure)	3.9
8. Doing well in athletics	1.9
9. Being hired for a job for which you applied	4.3
10. Being accepted at a particular school	3.8
11. Doing well in a social science class	3.7
12. Looking attractive (makeup and hair)	3.7
13. Receiving approval from your parents	3.8

Appendix I - continued

Activities Questionnaire Mean Ratings for Each Category

Mean Ratings of Domains of Functioning Rated by Participants as Important That They Perform Well - Continued

14. Being accepted into a social organization (e.g., club or sorority)		1.6
15. Wearing attractive, stylish clothes	2.9	
16. Getting academic recognition	3.7	
17. Doing well in a humanities class	3.0	
18. Being held in high esteem by your peers	3.5	
19. Writing creatively (e.g., poetry)	0.62	
20. Learning an aerobics routine	1.9	
21. Staying on a particular diet	1.4	
22. Doing well in a science class	3.2	
23. Writing technical papers (e.g., lab reports)	3.2	
24. Getting your professors' approval	3.3	
25. Being elected to an office (e.g., student government)	1.1	
26. Doing volunteer work	2.4	
27. Doing crafts or artwork	1.2	
28. Gardening	0.46	

Mean Ratings of Domains of Functioning Rated by Participants as Important To Other Persons That They Perform Well

1. Doing well in a math class (e.g., calculus)	3.0
2. Keeping your room, apartment or house clean	3.4
3. Giving a talk in public (e.g., a speech)	1.4
4. Cooking and baking	1.5
5. Driving a car	3.3

Appendix I - continued

Activities Questionnaire Mean Ratings for Each Category

Mean Ratings of Domains of Functioning Rated by Participants as
Important-To Other Persons That They Perform Well - Continued

6. Getting dates with attractive persons	1.9
7. Looking your best (weight and figure)	3.1
8. Doing well in athletics	1.6
9. Being hired for a job for which you applied	3.5
10. Being accepted at a particular school	3.5
11. Doing well in a social science class	3.3
12. Looking attractive (makeup and hair	3.1
13. Receiving approval from your parents	3.5
14. Being accepted into a social organization (e.g., club or sorority)	1.7
15. Wearing attractive, stylish clothes	2.4
16. Getting academic recognition	3.5
17. Doing well in a humanities class	2.4
18. Being held in high esteem by your peers	2.4
19. Writing creatively (e.g., poetry)	0.81
20. Learning an aerobics routine	0.38
21. Staying on a particular diet	0.98
22. Doing well in a science class	3.0
23. Writing technical papers (e.g., lab reports)	2.6
24. Getting your professors' approval	2.5
25. Being elected to an office (e.g., student government)	0.96
26. Doing volunteer work	1.3

Appendix I - continued

Activities Questionnaire Mean Ratings for Each Category

Mean Ratings of Domains of Functioning Rated by Participants as Important-To Other Persons That They Perform Well - Continued

27. Doing crafts or artwork	0.37
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28. Gardening	0.14
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Mean Ratings of Domains of Functioning Rated by Participants as Important That Others Perform Well

1. Personal Appearance	0.72
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2. Interpersonal Integrity	2.10
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3. Work Performance	1.18
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4. Personal Hygiene	0.72
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5. Help Others	0.20
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6. Academic Performance	2.30
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7. Creative Activities	0.20
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8. Housework	0.72
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9. Managing Money	0.20
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10. Child Care	0.13
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11. Volunteer Work	0.20
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12. Public Speaking	0.06
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13. Writing/Composition	0.13
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14. Athletic Performance	0.39
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15. Driving Ability	1.05
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16. Safety Standards	0.06
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17. Leadership Ability	0.06
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18. Church Attendance	0.06
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19. Lecture Clearly	0.33
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APPENDIX J

VIDEOTAPE SCRIPTS

Self-Oriented Perfectionism Videotape One

The protagonist and her friend are sitting and talking.

F: "You're graduating at the end of this semester aren't you?"

P: "That's right. I like school, but I'll be glad to finish and start working. I'm looking forward to getting my own place and a new car. I've worked hard these past for years and I'm ready for a profession."

F: "Have you started looking for a job yet? I've heard that it's best to get started on that early because the job market is still pretty rough right now, especially for entry-level jobs."

P: "I've been sending out applications and resumes for the past few months. I've only been applying for the very best entry-level positions in my field, and I've gotten several interviews."

F: "Really? That's great. Is there any company in particular that you're interested in?"

P: "Well, I recently interviewed at the Morgan Corporation in Raleigh. I really love the position I applied for. The job description makes it sound like the perfect job for me, the starting salary is great, and the benefits are outstanding. Also, if I got this job in Raleigh, I could be closer to my fiancée. He's in school in Durham. We're both pretty tired of seeing each other only on weekends."

F: "How did the interview go? Do you think that you have a good chance with the company?"

P: "I think so. Three people interviewed me at Morgan, and they all seemed to be pretty impressed with me. The personnel director even mentioned that my high grade point average and the fact that I've worked part-time in the field for two years make me a strong contender for this job."

F: "I think there's a good chance that they might make you an offer. Do you have any idea when you might hear something from the company?"

P: "When I interviewed last week, they told me that they notify people fairly quickly by mail. I expect to get some news any day now. I really want this job."

F: "I'm going to lunch. Would you like to come?"

P: "Let me check my mail first."

APPENDIX J - continued

VIDEOTAPE SCRIPTS

Self-Oriented Perfectionism Videotape One - Continued

She leaves, and shortly returns with a letter in hand.

P: (smiling) "This is from the Morgan Corporation!"

She tears open the letter, and her smile fades to a look of disappointment.

F: "What does it say?"

P: "I didn't get the job. It's a very nice letter, but they didn't hire me, and the position is still open. I really wanted that job. (Brief pause) If you don't mind, I think I'm going to skip lunch."

Friend looks concerned.

Protagonist continues to look downcast.

Self-Oriented Perfectionism Videotape Two

Protagonist and Friend are sitting together and talking.

P: "I'm going over to the fitness center to work out tonight around seven o'clock. Are you planning to come with me? It would be great to have some company."

F: "I'm not sure. I have some work I have to catch up on, and I need to get to it tonight. I'll go with you on Thursday, though. You've been going over to work out a lot lately."

P: "I know. I put on some weight last year, and now I can't fit into some of my clothes. I'm only an inch bigger all around, but it's important to me to get some control over my weight and shape. So I've set a goal for myself. I've been working out for at least an hour a day, almost every day, for the past month. My goal is to fit into the clothes that are too small now."

F: "Are you dieting? I can usually drop at least five pounds pretty fast if I eat mostly salads for a couple of weeks."

P: "I don't think dieting is a good idea. Sometimes people gain back even more weight after they go off the diet. Besides, dieting is not healthy. I'm committed to eating a balanced diet."

APPENDIX J - continued

VIDEOTAPE SCRIPTS

Self-Oriented Perfectionism Videotape Two - Continued

F: "I know. You're right about dieting. Anyway, you really look good. Even if you are bigger than you were, it doesn't show."

P: (smiles) "Thanks, but I really believe I need to get my old figure back. I don't want to end up like my older sister. She gained over 20 pounds during college, and she never has been able to lose it. I'm only a little bit heavier, and if I get control over it now, I won't be sorry later. It's really important to me to look my best."

F: "I'd better not go with you tonight. I should get caught up on my work before the weekend. I'll go with you Thursday, though."

P: "I hope all the time and effort I put into this exercise program pays off. I've lost count of how many hours I've devoted to this in the past month."

F: "Have you been keeping track of your progress?"

P: "No, I read that you should only check your weight or measurements once a month, so that you don't get discouraged by checking your progress too soon."

F: "Well, it's been a month. Why don't you weigh yourself or check your measurements now?"

P: "I don't have a tape or measuring tape here now. I'd have to go borrow one from someone."

F: "Why don't you just try on something that was too small before you started working out?"

Protagonist and her friend are standing in front of a full length mirror. P is trying to zip up jeans that are obviously too small. She has a disappointed look on her face.

P continues to tug on the zipper as she says:

P: "I can't believe this. All those hours of working out, and this is still too small. I worked so hard to reach my goal, and I have nothing to show for it. (sighs)

APPENDIX J - continued

VIDEOTAPE SCRIPTS

Socially Prescribed Perfectionism Videotape One

Protagonist walks into the room with a letter in her hand. She sits down, then picks up the telephone and dials.

Wait 10 seconds

P: "Hi, Mom. How are you doing." (Pause for reply)

"That's good. I'm glad to hear that you and Dad are OK." (Pause)

"Me? Well, I have some news about that scholarship I was hoping to get for next year. It's not good."

Pause about 15 seconds

"That's right, Mom. I didn't get the scholarship. The letter I got from the committee said that my grade point average just wasn't high enough to qualify. I guess that C I got in my Chemistry class last semester hurt me more than I thought it would."

Pause about 20 seconds

"I know that you are disappointed."

Pause

"But, Mom, I really did my best in that class."

Pause about 15 seconds

"Mom, I tried. I even met with the professor for extra help several times, but I just couldn't do any better than a C in that class."

Pause about 20 seconds

"I don't know where we will get the extra money for my tuition for next year."

Pause

"I'm already working 12 hours a week. If I work more hours, I may not be able to carry a full load of classes."

Pause

"I'm sorry you feel that I let you down, Mom."

APPENDIX J - continued

VIDEOTAPE SCRIPTS

Socially Prescribed Perfectionism Videotape One - Continued

Pause

"Really, Mom, I know that you and Dad don't have the extra money. I really tried to do my best."

"Mom, I have to go now. I'll call you later this week. Bye, Mom."

Pause about 10 seconds.

Hang up the telephone, calmly.

Socially Prescribed Perfectionism Videotape Two

Man is seated in the lounge on the sofa, and is reading.

P enters, sits next to him. They smile at one another.

P: "Hi, have you been waiting very long?"

M: "Just a few minutes. What have you been up to this morning?"

P: "I stopped to check my mail after class."

M: "Were you looking for that acceptance letter from the University of Florida? I'm really looking forward to us transferring there. If I graduate from their Physics program, I'll have a much better chance of getting into a good graduate school. We're going to love it there. It's a great school, and we can spend a lot of our free time on the beach."

While he is talking, P is looking at him with a slight frown, and seems tense.

P: "I have something to tell you."

M: "From the look on your face, it's not good news."

P: "I got a letter from the admissions committee at the University of Florida. They won't let me transfer next year."

M: "What? Why not?"

P: "Their nursing program is already full for next year. I guess I just didn't get my materials in on time. (Pause) They did encourage me to try again. The letter mentioned that my academic credentials are excellent."

APPENDIX J - continued

VIDEOTAPE SCRIPTS

Socially Prescribed Perfectionism Videotape Two - Continued

M: "I can't believe this. We've been planning for over a year to transfer down to Florida together. You know how important this is to me. I need to go to a school with a strong physics curriculum so that I can get into a good graduate school. Well, I have to go, with or without you. How could you mess this up."

P looks down briefly, then looks up at him.

P: "I'm sorry I let you down. Look, I tried to get my application in on time, but I had so much to do last semester. Remember, I was working part-time and carrying 18 hours. I just couldn't drop everything to work on that application."

M: "We're just going to have to get used to the idea that we're going to be apart next year. I was really counting on you to do what was necessary so you could come with me."

P: "I'm sorry that I let you down. I don't know what else to say."

Other-Oriented Perfectionism Videotape One

P walks up to the door of an office with a term paper in her hand. She knocks on the door.

Prof waits a few seconds, then opens the door.

Prof: "Yes?"

P: "Dr. Martin, could I talk with you? It's about your feedback on the first draft of my term paper. You told me after class yesterday that we could meet at your office today, and that you would give me some extra help on this paper. I really need some help with this."

Prof: "Sure, come on in. I can talk with you for just a few minutes, though. I'm rather busy, so I'm cutting back on my office hours today."

Prof goes over to her desk and sits down.

P enters the office and sits in the chair.

Prof: "How can I help you?"

P: "Well, I'd like to go over each of your written comments one at a time. I don't understand exactly what you want me to do to improve this paper."

APPENDIX J - continued

VIDEOTAPE SCRIPTS

Other-Oriented Videotape One - Continued

Prof reaches out and takes the term paper.

Prof: "Let me take a look at this paper."

Prof looks through the paper rather quickly, then hands it back to P.

Prof: "I think that my written feedback is sufficiently clear and concrete. I don't see how you might have a problem understanding what it is that I want you to do."

P takes a small breath, glances down at the paper.

P: "You wrote in the margins comments like 'Doesn't fit in very well here' and 'Lacks a smooth transition.' I would like you to show me an example of a smooth transition, and help me to see why some parts don't fit in well."

Prof: "Your paper is too choppy. I want you to use smoother transitions between paragraphs and to organize your thoughts more logically."

P: "I understand that. I guess what I'm asking is how I do that. I've never run into a problem like this before. Professors have always liked my writing. I'm just not sure what you want."

Prof glances at her watch, then says: "I don't know how I can make it anymore clear to you than I already have."

Prof glances at watch again, then says: "We're going to have to stop now. have to get back to this article I'm writing."

P: "If you could give me just one specific example of a smooth transition, I'm sure that I could figure out the rest."

Prof: "I'm sorry, I don't pre-grade papers."

P: "I don't expect you to do that. I just wanted you to help me, as you said you would after class yesterday."

Prof stands up, and says: "I'm sure you can figure this out on your own. I really must get back to work now."

P: "Could I have another appointment when you're not so busy?"

Prof: "I'm going to be tied up the rest of the week. The paper is due on Monday, so you'd better get right to work on it."

APPENDIX J - continued

VIDEOTAPE SCRIPTS

Other-Oriented Perfectionism Videotape One - Continued

Prof starts to walk toward the door.

P gets up and moves toward the door, then says: "OK, thanks anyway."

P walks out the door.

Prof closes the door.

P stands in the hall for a minute looking down at the paper in her hands with a slight frown.

Other-Oriented Perfectionism Videotape Two

P is sitting at a table in an empty classroom, She has books and papers stacked around her, and is looking through them. She glances at her watch, then picks up her pen and begins writing.

F walks in, obviously in a rush, lays down her bookbag, and says: "Hi, I'm sorry I'm late. I was talking on the phone, and I guess I lost track of time. "One of my friends saw her boyfriend ..."

P interrupts F by saying: "OK, but we really need to get to work. We've already lost 30 minutes, and we have to get this presentation done so that we can present something decent in class tomorrow. Let's look over what we each have, and try to figure out how we can tie it all together. I have my outline, figures, and text right here."

F hesitates a moment and looks a little uncomfortable as she says: "I'm not exactly ready right now; I need to spend another couple of hours at the library looking for more information. I can write up my part later tonight. (laughs) I work best under pressure, anyway."

P looks surprised, and says: "You're not ready yet? I thought that we agreed that we were going to get this presentation organized today. We've had over four weeks to do the research. You told me that you'd be ready by today so we can be prepared for class tomorrow. I expected you to do your part."

F says offhandedly: "Sorry, I just got busy in the last couple of days. I have to spend some time with my friends, you know."

F picks up her bookbag, and says: "Look, I'll go to the library right now, and do the research for my part of the presentation. I'll call you around 10 tonight. We can pull an all nighter if we have to."

APPENDIX J - continued

VIDEOTAPE SCRIPTS

Other-Oriented Perfectionism Videotape Two - Continued

P: "I told you yesterday that I have to study for a test tonight. Why don't you care about this presentation?"

F: "It's only 20% of our grade. It's not that important."

P: "It's important to me. I care about my grades. We talked about this. I expected you to do your share."

F starts to walk out, then says: Look, it's not a big deal. I'll put something together tonight, then I'll call you. We can figure out what we're going to say right before class tomorrow."

F walks out.

P leans back and rubs her head. She sighs and looks at her outline.

APPENDIX K

Videotape Validation Survey

For each scene below, please circle your choices for a, b, and c.

SCENE 1

Think about the scene you just viewed. To what extent was the main character experiencing...

a. A situation in which she believed that she failed to meet an important goal she had set for herself?

not at all to a great extent

1-----2-----3-----4-----5

b. A situation in which she believed that she failed to live up to someone else's expectations for her behavior or performance?

not at all to a great extent

1-----2-----3-----4-----5

c. A situation in which she believed that someone else failed to live up to her expectations?

not at all to a great extent

1-----2-----3-----4-----5

SCENE 2

Think about the scene you just viewed. To what extent was the main character experiencing...

a. A situation in which she believed that she failed to meet an important goal she had set for herself?

not at all to a great extent

1-----2-----3-----4-----5

APPENDIX K - continued

Videotape Validation Survey - continued

SCENE 2 - Continued

b. A situation in which she believed that she failed to live up to someone else's expectations for her behavior or performance?

not at all to a great
extent

1---2---3---4---5

c. A situation in which she believed that someone else failed to live up to her expectations?

not at all to a great
extent

1---2---3---4---5

SCENE 3

Think about the scene you just viewed. To what extent was the main character experiencing...

a. A situation in which she believed that she failed to meet an important goal she had set for herself?

not at all to a great
extent

1---2---3---4---5

b. A situation in which she believed that she failed to live up to someone else's expectations for her behavior or performance?

not at all to a great
extent

1---2---3---4---5

c. A situation in which she believed that someone else failed to live up to her expectations?

not at all to a great
extent

1---2---3---4---5

APPENDIX K - continued

Videotape Validation Survey - continued

SCENE 4

Think about the scene you just viewed. To what extent was the main character experiencing...

a. A situation in which she believed that she failed to meet an important goal she had set for herself?

not at all to a great
 extent

1----2----3----4----5

b. A situation in which she believed that she failed to live up to someone else's expectations for her behavior or performance?

not at all to a great
 extent

1----2----3----4----5

c. A situation in which she believed that someone else failed to live up to her expectations?

not at all to a great
 extent

1----2----3----4----5

SCENE 5

Think about the scene you just viewed. To what extent was the main character experiencing...

a. A situation in which she believed that she failed to meet an important goal she had set for herself?

not at all to a great
 extent

1----2----3----4----5

APPENDIX K - continued

Videotape Validation Survey - continued

SCENE 5 - Continued

b. A situation in which she believed that she failed to live up to someone else's expectations for her behavior or performance?

not at all to a great
extent

1-----2-----3-----4-----5

c. A situation in which she believed that someone else failed to live up to her expectations?

not at all to a great
extent

1-----2-----3-----4-----5

SCENE 6

Think about the scene you just viewed. To what extent was the main character experiencing...

a. A situation in which she believed that she failed to meet an important goal she had set for herself?

not at all to a great
extent

1-----2-----3-----4-----5

b. A situation in which she believed that she failed to live up to someone else's expectations for her behavior or performance?

not at all to a great
extent

1-----2-----3-----4-----5

c. A situation in which she believed that someone else failed to live up to her expectations?

not at all to a great
extent

1-----2-----3-----4-----5

APPENDIX L

Participant Consent Form

I agree to participate in this study being conducted by Patricia Cassady under the supervision of Dr. Rosemary Nelson-Gray, a member of the faculty of the Department of Psychology at the University of North Carolina at Greensboro. The purpose of this study is to examine the effect upon mood of the relationship between different personality styles and different kinds of experiences that might be encountered by persons in this society. I understand that this study will be conducted in three sessions on three different days, and that each participant who completes the three sessions will be entered in a lottery with a first prize of fifty dollars and a second prize of twenty-five dollars. In addition, I will receive one research participation credit for each session that I complete. I further understand that I will be asked to complete a number of short questionnaires at various times throughout the course of the study designed to assess my current mood. In each experimental session I will view a short videotape which contains two brief scenes in which a young woman encounters various kinds of common experiences that might be encountered by persons in this society. Each session will take approximately 30 minutes to complete.

I have been informed of the procedures to be followed in this study, and I realize that the risks and/or the discomforts that may result from my participation in this study are minimal. I realize that all information will be held in confidence, and that my name will not be associated in any way with the data collected in this study. Moreover, I realize that the results of this study may be published in the form of group data, and that no individual participants will be identified by name. I recognize that all data collected during the course of this study will be stored for five years in a locked laboratory, and those data will not contain information which could identify individual participants. At the end of the five year period, all data will be destroyed.

I recognize that I am free to terminate my participation in this study at any time without penalty or prejudice. The experimenter will answer any questions I may have regarding this study. I realize that I may obtain further information about the conduct and review of human research at this institution by telephoning the Office of Sponsored Programs at 334-5878.

Please ask any questions you may have. After your questions have been answered, please sign below if you agree to participate in this study.

Please Print Your Name Here

Please Sign Your Name Here

Witness

Date

APPENDIX L - continued

Participant Consent Form

I agree to participate in this study being conducted by Patricia Cassady under the supervision of Dr. Rosemary Nelson-Gray, a member of the faculty of the Department of Psychology at the University of North Carolina at Greensboro. The purpose of this study is to examine the effect upon mood of the relationship between different personality styles and different kinds of experiences that might be encountered by persons in this society. I understand that this study will be conducted in three sessions on three different days, and that each participant who completes the three sessions will be entered in a lottery with a first prize of fifty dollars and a second prize of twenty-five dollars or will be paid ten dollars for completing all three sessions at the end of the third session. I further understand that I will be asked to complete a number of short questionnaires at various times throughout the course of the study designed to assess my current mood. In each experimental session I will view a short videotape which contains two brief scenes in which a young woman encounters various kinds of common experiences that might be encountered by persons in this society. Each session will take approximately 30 minutes to complete.

I have been informed of the procedures to be followed in this study, and I realize that the risks and/or the discomforts that may result from my participation in this study are minimal. I realize that all information will be held in confidence, and that my name will not be associated in any way with the data collected in this study. Moreover, I realize that the results of this study may be published in the form of group data, and that no individual participants will be identified by name. I recognize that all data collected during the course of this study will be stored for five years in a locked laboratory, and those data will not contain information which could identify individual participants. At the end of the five year period, all data will be destroyed.

I recognize that I am free to terminate my participation in this study at any time without penalty or prejudice. The experimenter will answer any questions I may have regarding this study. I realize that I may obtain further information about the conduct and review of human research at this institution by telephoning the Office of Sponsored Programs at 334-5878.

Please ask any questions you may have. After your questions have been answered, please sign below if you agree to participate in this study.

Please Print Your Name Here

Please Sign Your Name Here

Witness

Date

APPENDIX M

Debriefing Statement

Thank you for your participation in this clinical psychology study. The purpose of this study was to examine the effect upon mood of the interaction between different personality styles and several different types of stress that persons might experience as a result of encountering a number of relatively common situations. The independent variables in this study were personality type and the different types of situations experienced by the protagonist in the videotaped scenarios. The dependent variable was mood change that may have resulted from imagining that one experienced the situations depicted in the scenarios. The hypothesis being tested was that persons with certain types of personalities might be more apt to experience mood changes in response to specific kinds of stress.

You were selected on the basis of your responses to a questionnaire administered during mass testing at the beginning of this semester and your responses to the interview which you completed before being asked to participate in this study.

It is not possible to discuss your personality style or your responses to the study with you at the present time. If you are interested in learning more about your personality, you may wish to consult with any of the agencies listed below.

UNC-G Student Counseling Center
12 Gove Building
UNC-G Campus
334-5874

UNC-G Psychology Clinic
377 Eberhart Building
UNC-G Campus
334-5662

Guilford County Mental Health Clinic
201 N. Eugene Street
Greensboro, N. C.
373-3630

APPENDIX N

Figure 1: Adjusted Mean DACL Scores for the Interaction of Dimensions of Perfectionism and Participant Personality Style

